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EUROPEAN PATENT APPLICATION

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(72) Inventor: Iwai, Takeyuki
c/o Sony Corporation 7-35 Kitashinagawa 6-chome
Shinagawa-ku Tokyo (JP)

Yoneyama, Shigeyuki
c/o Sony Corporation 7-35 Kitashinagawa 6-chome
Shinagawa-ku Tokyo (JP)

Ikegami, Tsukasa
c/o Sony Corporation 7-35 Kitashinagawa 6-chome
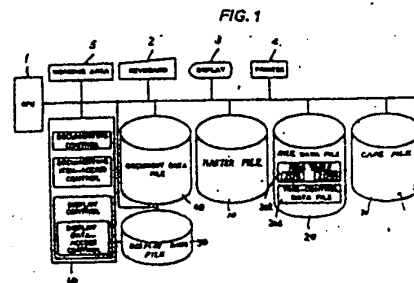Shinagawa-ku Tokyo (JP)

Fujii, Reikichi
c/o Sony Corporation 7-35 Kitashinagawa 6-chome
Shinagawa-ku Tokyo (JP)

Miyauchi, Shigeru
c/o Sony Corporation 7-35 Kitashinagawa 6-chome
Shinagawa-ku Tokyo (JP)

(74) Representative: Ayers, Martyn Lewis Stanley et al
J.A. KEMP & CO. 14 South Square Gray's Inn
London, WC1R 5EU (GB)

(54) Computerized system for managing preparation and prosecution of applications in various countries for protection of industrial property rights.

(57) A computerized system for managing preparation and prosecution of applications for protection of industrial property rights in various contries includes a data memory which stores a rule data for controlling input, output and internal operation of the system. The rule data includes information concerning required actions at each step of prosecution of applications in each country when the applications are filed. Such rule data is so designed as to provide proper guidance to the operator for guiding proper entry of input data in order to avoid error in operation. Preferably, the rule data consists of common rule data components which are commonly applicable for applications in any country and local rule data components which are specifically applicable for a specific country

FIG. 1

Description

COMPUTERIZED SYSTEM FOR MANAGING PREPARATION AND PROSECUTION OF APPLICATIONS IN VARIOUS COUNTRIES FOR PROTECTION OF INDUSTRIAL PROPERTY RIGHTS

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates generally to a computerized system for managing preparation and prosecution of applications for protection of industrial property rights, such as patents, in various countries. More specifically, the invention relates to a computer system useful for docketing new applications to be filed in various countries having mutually different laws and rules for giving protection for the industrial property rights, controlling preparation of application documents and procedure for filing the applications. docketing intermediate actions from patent offices of various countries, controlling terms including reminders to man in charge of the subjective application of the due date and so forth, and issuing instructions to agents in various contries for takeing required actions.

Description of the Background Art

As is well known, different countries require different procedures in allowing patents, registration of utility models, design trademarks and so forth. This prevents simplification of preparation and prosecution of applications filed in various countries. For instance, in preapration of the application, different countries require different minimum documents for obtaining filing date, for obtaining benefits of priority rights and so forth. Also, the different countries take different term-sets for prosecuting the applications. In cases when the applicant uses foreign agents for prosecuting applications in various countries, each set of instructions to be issued by the applicant has to be timely and adapted to the practice of the subjective country. This requires substantial attention by the man in charge of the application. This requires the applicant to hire qualified clerks for managing the applications to be filed and prosecuted in the various countries. This will increase the cost of filing the apllications in various contries and serves as a discouraging factor for the applicant to file the applications.

In order to manage such complicated procedures in various countries, there have been developped and proposed various computerized managing systems in the recent years. Such prior proposed systems are designed to manage applications in each country in a managing system which is independent of that for managing applications in other countries. This makes the overall system unacceptably expensive. Furthermore, the prior proposed managing systems are governed by softwear programs containing rules for prosecuting and controlling applications of the associated country as a part of the program. This requires modification of the entire program everytime there is a revision of laws in the associated country or a revision of internal procedures.

SUMMARY OF THE INVENTION

Therefore, it is an object of the present invention to provide a computerized system which is designed to resolve the problems in the prior proposed systems and is less-expensive than the prior systems.

Another object of the invention is to provide a computerized system suitable for managing applications for protection of industrial property rights in various countries. which allows management of preparation and prosecution of applications with a simplified procedure.

A further object of the invention is to provide a computerized magnaging system for industial property applications in various countries in which it is easy to modify the procedure when necessary for adapting the system to a revision of the laws in the concerned countries and to a modification of the internal procedure for the applicant.

A still further object of the present invention is to provide a computerized system for managing prosecution of industrial property applications, which can issue instruction letters for foreign agents representing the applications before the patent office in the countries concerned, in a form suitable for accurately and definitely providing instructions for the foreign agents.

A yet further object of the present invention is to provide a computerized system for managing prosecution of indstrial property applications, which does not require skill in operating and controlling prosecution of applications.

In order to accomplish the aforementioned and other objects, a computerized system for managing preparation and prosecution of applications for protection of industrial property rights in various contries, according to the present invention, in cludes a data memory which stores a rule data for controlling input, output and internal operation of the system. The rule data includes information concerning required actions at each step of prosecution of applications in each country when the applications are filed. Such rule data is so designed as to provide proper guidance to the operator for guiding proper entry of input data in order to avoid error in operation.

In the preferred embodiment, the rule data consists of common rule data components which are commonly applicable for applications in any country and local rule data components which are specifically applicable for a specific country.

In the proposed system, the rule data is facilitated out of the computer program so that updating of the rule data when the necessity occurs can be performed easily without having to modify the entire program.

According to one aspect of the invention, a system for managing preparation and prosecution of applications to be filed in various countries for

protection of industrial proterty right. comprises first memory means for storing informations concerning each application, including identification of application and identification of country to file the application. second memory means for storing rule for controlling processing of application throughout preapration and prosection of the application. the rule being established with respect to each contry to file the applications for defining order of steps to be taken during preparation and prosecution of the application and for establishing a time table for due dates for taking action with respect to the corresponding country and accessible by identifying the country to which the application is filed. third means for displaying necessary information and guidance for processing the application including entry of data according to the rule stored in the second means. and fourth means for allowing entry of data and command for operating the managing system and controlling updating of contents in the first and/or second memory means.

Preferably, first memory means further comprises a local case data file having a plurality of file pages each storing case data of each corresponding application, the case data including data indicative of history of the application indicative of current status of the application.

The second memory may store the rule including a rule for selecting one or more necessarily occuring next steps with respect to current status of the application. The rule in the second memory means comprises a rule table set with respect to each country to file the application and accessible by indentifying the country, and the tule table can be updated through the fourth means.

The system further comprises fifth memory means for storing a plurality of display formats to be displayed on the third means. and the second means storing the rule including a rule for selecting one of display format according to the step to entry data.

In the preferred construction, the second memory means stores data with respect to each of a plurality of steps in each rule table. each of steps in the rule table are itentified by a step number given thereto. The second memory means further comprises a common step table containing all of necessary steps for preparation and prosecution of applications in all the countries to file the application. each step in the common step table is given step number for identifying the step, and the rule table for each country is established by selecting the steps in the common step table in order according to normal procedure to be taken in preparing and prosecuting the application in the subject country. The steps in the common step table and the rule tables are asseccisble through the fourth means by entrying step numbers given to respective steps for identification thereof. The step number to be given for each of steps in the rule table has first component common to the step number of each corresponding step in the common step table and second component independent of the step number of the corresponding step in the common step table for distinguishing the steps in the rule table from the corresponding step in the common step table. The

rule table in the second memory means further contains term calculation data for calculating and deriving due date with respect to a reference date in each step. the term calculation data being asseccible by identifying step by entry of step number through the fourth means.

Further preferably. the rule table contains data indicative of effective period of each step therein in view of the laws and/or rules in the subject country, which effective period is defined by the staring date data and ending date data of the effective period. The effective period set in the rule table with respect to each step in the rule table is set in terms of a reference date. and the effective period data being associated with an identification of the reference date. The fourth means compares an input date corresponding to the reference date with the starting date data and ending date data in response to entry of the step number for checking whether the updating of step date for the step identified by entered step number is valid or not. so that the step data can be updated only by the valid data.

The system further comprises fifth memory means for storing a plurality of display formats to be displayed on the third means, and the second means storing the rule including a rule for selecting one of display format according to the step to entry data. Each of the display format is accessible by identifying step in the rule table by entry of the step number. In addition, the system further comprises sixth memory means for storing a plurality of printer document data which is accessible by identifying the step for preaprating letters. The printer document data stopred in the sixth memory means comprises first component containing fixed letter format to be commonly used in various steps and for various applications in various countries, and second component adapted to accept specific variables with respect to subject step and subject application. The second component stored in the sixth memory means is a letter format taking the specific variable as a part of the letter. The fourth means picks up variables from the corresponding file page of the local case data file in the first means for automatically completing the letter in the second component. The fourth means further picks the variables to constitute part of the letter of the second component from the information stroed in the first memory means.

According to another aspect of the invention. a system for managing preparation and prosecution of applications to be filed in various countries for protection of industrial proterty right. comprises first memory means for storing informations concerning each application. the first memory means comprising database file including identification of each application. identification of country to file the application, filing particular and so forth second memory means for storing a rule table for controlling processing of application throughout preapration and prosection of the application and a time table for controlling calculation of the term. the rule being established with respect to each contry to file the applications for defining order of steps to be taken action during preparation and prosecution of the

application. the steps in the rule table being identified by given step numbers and for establishing a time table for determining due dates for taking action with respect to the corresponding country and accessible by identifying the country and step number of corresponding step set in the rule table in the process of application. third means for establishing case data file containing a plurality of file pages. each of which is adapted to store file data with respect to subject application. the store file data including a history data showing the histroy of preparation and prosection and current status of the subject application. each file page of the case file further including data showing due date for taking necessary action derived based on entered data according to the time table. and fourth means for allowing entry of data and command for operating the managing system and controlling updating of contents in the first and/or second memory means.

According to a further aspect of the invention, a system for managing preparation and prosecution of applications to be filed in various countries for protection of industrial proterty right, comprises first memory means for storing informations concerning each application. the first memory means comprising database file including identification of each application. identification of country to file the application. filing particular and so forth. second memory means for storing a rule table for controlling processing of application throughout preapration and prosection of the application and a time table for controlling calculation of the term. the rule being established with respect to each contry to file the applications for defining order of steps to be taken action during preparation and prosecution of the application. the steps in the rule table being identified by given step numbers and for establishing a time table for determining due dates for taking action with respect to the corresponding country and accessible by identifying the country and step number of corresponding step set in the rule table in the process of application. third memory means for establishing case data file containing a plurality of file pages. each of which is adapted to store file data with respect to subject application. the store file data including a history data showing the histroy of preparation and prosection and current status of the subject application. each file page of the case file further including data showing due date for taking necessary action derived based on entered data according to the time table. fourth memory means for storing a plurality of display formats, each of which is corresponded to one of the steps set in the rule table and is accessible by identifying the subject step by setting the step number. and each of the display format including guidances for requiring entry of data. a display. and fifth means for allowing entry of data and command for operating the managing system. reading out one of the display formats according to set step number for displaying selected one of display formats on the display. and controlling updating of contents against display format.

In the preferred construction. the fourth memory means includes first group of display formats

accessible through the fifth means for updating the rule table. second group of display format accessible through the fifth means for updating the time tableµ and third group of display formats accessible through the fifth means for updating the case data file. The step number to be given for each of steps in the rule table has first component common to the step number of each corresponding step in the common step table and second component independent. of the step number of the corresponding·step in the common step table for distinguishing the steps in the rule table from the corresponding step in the common step table. The fourth memory means further includes a display format to be utilized for esatblishing the rule table by selecting steps in the common step table. The fourth memory means further includes a display format to be utilized for establishing the time table.

According to a still further aspect of the invention, a system for managing preparation and prosecution of applications to be filed in various countries for protection of industrial proterty right. comprises fi memory means for storing informations concern. each application. the first memory means comprising database file including identification of each application, identification of country to file the application, filing particular and so forth. second memory means for storing a rule table for controlling processing of application throughout preapration and prosection of the application and a time table for controlling calculation of the term. the rule being established with respect to each contry to file the applications for defining order of steps to be taken action during preparation and prosecution of the application. the steps in the rule table being identified by given step numbers and for establishing a time table for determining due dates for taking action with respect to the corresponding country and accessible by identifying the country and step number of corresponding step set in the rule table in the process of application. third memory means for establishing case data file containing a plurality of file pages. each of which is adapted to store file c with respect to subject application. the store· data including a history data showing the histroy of preparation and prosection and current status of the subject application. each file page of the case file further including data showing due date for taking necessary action derived based on entered data according to the time table. fourth memory means for storing a plurality of printer document formats. each of which is corresponded to one of the steps set in the rule table and is accessicle by identifying the subject step by setting the step number. a printer. and fifth means for allowing entry of data and command for operating the managing system. reading out one of the printer document formats according to set step number for displaying selected one of printer document formats for preparing letter. and controlling updating of contents in the first. second. third and fourth memory means

According to a still further aspect of the invention. a computerized system for managing and controlling works. each containing a plurality of steps comprises first memory means for storing first data for

performing operation in each step, the first memory means containing the stored first data with respect to all of possible steps for performing the works. second memory means for storing second data for performing operation in steps to perform each work, the second data being established by selecting and picking up the first data from first memory means according to possible steps to be taken for performing subjective work. the second data including next step data for identifying one or more possible next steps for guiding operations, and the second data being accessible by indentifying subjective work to be done. third means for allowing manual access of the first and/or second means for updating the first and/or second data, and fourth means for managing and/or controlling operation each steps in each work accroding to the second data in the second memory.

The second memory means includes a first memory section storing the second data, and a second memory section storing tables for setting term for completing the associated steps. All of the term setting rule tables are stored in the first memory means and picked up through the third means for establishing the second memory section.

The system further comprises local work memory means for storing data with respect to each specific work and to be updated according to the second data. Each of the specific work data in the local work memory means is accessible by identifying the work by means of an unique work code signal to each specific work. Each term setting table is accessible by identifying the associated step.

According to a yet further aspect of the invention, a system for managing preparation and prosecution of applications for protection of industrial property rights, comprises first memory means for storing information concerning each application, including identification of application, second memory means for storing rules for controlling processing of applications throughout preapration and prosection of the application, the rule defining order of steps to be taken during preparation and prosecution of the application and establishing a time table for due dates for taking action, the rule including identification of next steps one of which is possibly occur subsequently, third means for displaying necessary information and guidance for processing the application including entry of data according to the rule stored in the second means, and fourth means for allowing entry of data and commands for operating the managing system and controlling updating of contents in the first and/or second memory means.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will be understood more fully from the detailed description given herebelow and from the accompanying drawings of the preferred embodiment of the invention, which, however, should not be taken to limit the invention to the specific embodiment but are for explanation and understanding only.

In the drawings:

Fig. I is a block diagram of the preferred embodiment of computerized system for mana-

ging preparation and prosecution of applications for protection of indstrial property rights. according to the invention;

Fig. 2 is an explanatory illustration showing data structure of a common step table set in a rule data file memory in the system of Fig. I;

Fig. 3 is an explanatory illustration showing a data structure of a step set table in the rule data memory for setting steps to be take with respect to each contry to file an application;

Fig. 4 is a flowchart of a program for setting steps with respect to each country;

Fig. 5 is an explanatory illustration showing a rule data updating menu to be displayed on a display of the system of Fig. I, for updating rule data;

Fig. 6 is an explanatory illustration showing form of display similar to that in Fig. 5, but showing an example of dispaly showing non-set items;

Fig. 7 is an illustration showing an example of a format of display for entry of data of common steps, which is displayed on the display;

Fig. 8 is an illustration showing an example of format of display for entry of step selection data with respect to each designated country;

Fig. 9 is an illustration showing an example of format of display for setting local steps for prosecution of each of specific countries;

Fig. I0 is an illustration showing an example of format of display for setting next step with respect to each designated country;

Fig. II is a flowchart of a due date setting program to be executed by the system of Fig. I;

Fig. I2 is an illustration showing an example of display format for setting of due date calculation table;

Fig. I3 is an explanatory illustration showing an example of data structure showing memu of due date set;

Fig. I4 is an explanatory illustration showing due date setting data format;

Fig. I5 is a flowchart of a next step processing program to be executed in the system of Fig. I;

Fig. I6 is an explanatory illustration showing format of unit case file memory in the system of Fig. I;

Figs. I7, I8 and I9 are explanatory illsutrations showing a format of an intermediate action processing menu to be displayed on the display;

Fig. 20 is an illustration showing examples of entry of time date for the the intermediate action processing format;

Fig. 2I is a flowchart of a final date setting program in an intermediate action processing, which is to be executed by the system of Fig. I;

Fig. 22 is an illustration showing examples of entry of time date for the the intermediate action processing format;

Fig. 23 is a flowchart of an printing program for printing instructions for agents;

Fig. 24 is an illustration of a display format of a print menu; and

Figs. 25 and 26 are illustration showing

display formats for issuing instruction letters for agent.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawings. particularly to Fig. I. the preferred embodiment of a system for managing preparation and prosecution of applications for protection of industrial property rights in various countries, according to the present invention, comprises a computer including a central processing unit (CPU) I. CPU I is associated with various memories. each of which constitutes a data file. and a peripheral equipments. such as a keyboard 2, a display unit 3, a printer 4 and so forth. The system also has a working area 5 for temporarily registering input data, intermediate date and so forth. In the shown embodiment, the memories constituted of a master file I0, a rule data file 20, a case file 30, a document format data file or document data file 40, a display format data or display data file 50 and a control data file 60.

The master file I0 is divided into a plurality of unit memory blocks for storing basic data, such as agents' name and agents' address accessible by agnet's code given to each agents, name of internal staff in chage of applications accessible by identifying staff code, country names accessible by abbreviated country code and so forth. The case file 30 includes a plurality of memory blocks of a desired memory capacity. Each unit memory block constitutes a storage for storing basic or fundamental data of an individual application, such as identification of the application, i.e. data of basic application based on which priority right under Paris convention is to be claimed, title of the invention, names of inventors, and so forth. The unit memory block of the case file 30 further designed to store agent's docket number, application numbers, filing date, first (un-examined) publication number. first publication date, second (examined) publication number, second publication date, patent number, issue date and so forth. As is well known, the applications in the different countries derived from a single invention will be hereafter referred to as "family applications". Similarly. patents issued for the same invention in different countries will be hereafter referred to as "family patents". Each of the other sections in the case page are designed to store particular data in each designated country.

If necessary or desired, the case page may store a brief summary of the invention and a typical drawing for knowing the subject matter of the invention. In this base, the brief summary may be prepared specially for index search for locating related applications utilizing keywords. On the other hand. the local case data section I06 may include data of material references uncovered during prosecution of the subject application. Such data of references with respect to each application will be helpful for disclosing material references to U.S. examiner. Canadian examiner, Chinese examiner and so forth for satisfying the applicant's duty of disclosure given in the laws or rules. Each case page may be expandable of the size by increasing the local case

data section for allowing entry of local data with respect to later derived applications. such as continuation and/or continuation-in-part (CIP) application filed in the Unitead States. divisional applications. confirmation patents based on issued U.S. or British patent and so forth. Such continuation application. CIP application, divisional applications, confirmation patents will be hereafter referred to as "later derived application or applications".

Though the specific structure of data in the case file 30 has been disclosed hereabove. any data structure can be taken for forming the case file. For example, although the foregoing specific embodiments separates the date to be stored in the case file into common data component and local data component, it would be possible to establish the case page with respect to each application in each counatry. In this case, common data component should be included in each case page. Furthermore, in such case. each case page may include data identifying family applications so that the family application may be easily accessed.

The rule data file 20 is generally designed foi storing rules for operating the preferred embodiment of the system. The rule data file 20 has two separate sections. One of the sections stores a step-control rule table which will be hereafter referred to as "rule table 202". The other section stores a table for setting and controlling times, such as priority deadline. due data for responding to office actions and to paying the issue fee. printing fee, patenting fee, maintenance tax and so forth, which table may be hereafter referred to as "time-control table 204".

Fig. 2 generally show structure of a section 206 of rule table 202 for storing common step data. This section 206 will be hereafter referred to as "common step rule section 206". The common step rule section 206 of the rule table 202 is separated into a plurality of unit blocks 2I0 for storing data of each individual common step. Each of this blocks will be hereafter referred to as "common step block 2I0". Each common step block 2I0 has a data area 2I0I f storing common step number, a data area 2I02 fc storing common step name given to the corresponding common step, a data area 2I03 for storing abbreviated step name which is derived from the given common step name, and a data area 2I04 for storing a display format name (display name) given for a display format which is stored in the display data file 50 and will be discussed later, corresponding to the common step. The common step rule section 206 includes the common step blocks 2I0 covering all of possible process steps possibly occur during preparation and prosection of applications in various countries. For instance. the common step rule section 206 contains the common step sections 2I0 storing step data of filing of first application. filing application. receiving an official filing receipt. first publication, requesting of an examination. receiving of search report. receiving of an office action. filing a response to the office action, filing an amendment. receiving a final office action or decision of rejection. filing an appeal. second publication. receiving an opposition. receiving a

notice of allowance. grant or acceptance. issue of patent and so forth. Such common step blocks 210 are given numbers such as ˜A0I˜. ˜00I˜ or so forth. in a predetermined order. This number serves as the common step number. Therefore. such numbers are stored in the data area 2I0I of respective common step blocks 2I0.

The common step name is given to each of the steps set in each corresponding common step blocks 2I0 so as to identify the corresponding step. Fig. 7 shows an example of a display format to be displayed on the display unit 3 for entry of the common step data in the common step rule section 206. As will be seen from Fig. 7, in the shown embodiment. step data of preparation and filing of the first application in the first filing country is set under the common step number ˜A0I˜. In the date structure of the common step block numbered ˜A0I˜, the common step name is given as ˜FIRST APPLICATION˜. Since the given name is simple and short enough the same name. i.e. ˜FIRST APPLICA-TION˜, is used as abbreviated name sect in the data area 2I03. The corresponding display format is names as ˜PREPARATION OF APPLICATION˜. Simi-larly. the filing of application and receiving of an official filing receipt is set under the common step number ˜00I˜. For this step, common step name is given as ˜FILING/FILING RECEIPT˜. The step name as set in the data area 2I02 is abbreviated as ˜FILING/RECEIPT˜ and set in the data area 2I03. The corresponding display format name is given as ˜FILING/FILING RECEIPT˜ and set in the data area 2I04. In the same manner. various process steps in preparation and prosecuion of the application is set in the common step rule table 206.

The common step rule table 206 as set forth above can be updated when necessity occurs by accessing the rule data file 20 through the keyboard 2. When the rule data file 20 is accessed for updating the common step rule table, the display unit 3 displays the display format of Fig. 7 so as to allow modification of the already set step data, addition of additional step or deletion of already set step. This makes it easy to adapting the system operation when revision of laws and/or rules occurs in some country or necessity occurs to modify the procedure in the applicant. The detailed procedure for updating the common step rule table 206 will be discussed later.

The rule table 202 also has a section for storing process step data for preparing and prosecuting application in each state or country. This section will be hereafter referred to as "local step table section 208". The local step rule table 208 is basically derived by utilizing the common step table in the common step rule table 206. The data format in the local step rule table 208 will be seen from Fig. 3. The local step rule table 208 is set with respect to each country to file the application. Therefore. the local step rule table 208 is separated into a plurality of blocks for storing step data with respect to the corresponding state. Each of the blocks storing the step data of one table to file the application will be hereafter referred to as ˜local rule block 220. Each local rule block 220 is separated into a plurality of data sections. Each

data sections will be hereafter referred to as ˜local step data section 2200. Each of the local step data section 2200 is further separated into a plurality of data areas. Each local step data section 2200 can be identified by country or state code set in a data area 22I the local rule block 220, a route code in a data area 222 of the local rule block 220. By the state code in the data area 22I and the route code in the data area 222. one of the the local step data section 2200 can be identified. Namely. in the recent worldwide patenting system, there are a plurality of route for filing and prosecuting the application. For instance. in order to file a patent application in the United States. the applicant can select a route to be taken among two route, i.e. a first route for directly filing the patent application through an agent or directly to the United States Patent and Trademark Office. and a second route in which the application is filed with an International Bureau under Patent Cooperation Treaty (PCT). When the application is filed in European states, such as United Kingdom, Federal Republic of Germany. the first route for filing an application directly with a Patent Office or Patent and Trademark Office in each desired state will be referred to as ˜national route˜. The second route filing the application under PCT will be hereafter referred to as ˜PCT route˜. Additional route is available to file the patent application with an European Patent Office established under an Euro-pean Patent Convention (EPC). This third route to file the application in the European countries through European Patent Office will be hereafter referred to as ˜EPC route˜. In addition, some countries allows register of patent allowed in other country. Such registration of other state's patent will be called as ˜confirmation patent˜. Therefore. a route to file an application for registration of the confirmation patent can be taken in some states. Such route for obtaining confirmation patent will be hereafter as a ˜confirmation patent route˜.

Therefore, in the route code data area 2202 accepts entry of one of predetermined route codes for identifying route of the application. As set forth above, since the patent applications may be filed in the United States through two mutually distinct routes, different local rule blocks 220 would become necessary for the United States Patent Application. Similarly. since three routes can be taken for filing in European countries. such as United Kingdom. three different local rule blocks 220 have to be set for dealing with the United Kingdom Patent applications.

The state code in the data area 220I and the route code in the data area 2202 serve as identification of the local rule block 220 and common throughout the step data set in the same local rule block. Therefore, these two data areas 220I and 2202 are provided only in the first step data section 2200.

A data area 2203 is provided for accepting entry of step number for setting one of the process step in the common step rule table 206. Therefore. the data in the state number data area 2203 serves as identification factor of selected one of step in the common step rule section 206. Data areas 2204 and 2205 are provided for setting legally effective period of the set local rule block and items to which the

legally effective period is applied. These two factors become necessary in view of revision of laws and/or rules in the state designated by the state code in the state code data area 2201. For instance, some additional process step may become necessary when revision of laws and rules in the corresponding state occurs for accepting additional data. Also, some process steps may become unnecessary in view of the laws and/or rules revised. When the laws and/or rules are revised, possibility of erroneous entry of data increases due to confusion of the operator.

For example, in the old patent law in the Federal Republic of Germany before January I, 1981, the application is examined and published after passing the examination for putting the allowed application into the public inspection. A predetermined period is set forth filing an opposition. After expiration of the opposition period, a decision of grant is issued to issue the patent in response to payment of granting fee. The laws has been revised and new laws become effective on Janaury I, 1981. On the other hand, after January I, 1978, the application filed is at first published at around 18 months of the first filing date as the first publication. In the revised laws of 1981, the second publication will not be published. Therefore, it becomes not possible to file an opposition against the second publication. As a compensation, chance for filing an opposition is given after issue of patent. In order to adopted the system for such change of practice in the states to file the application, setting of the legally effective term and the reference item or items would be very useful. If entry of data is made in the wrong step data block 2200, an error indication will be given and entry of date will be refused. For example, in the aforementioned revision in the Federal Republic of Germany, the revised laws are applicable for the application filed after the effective date January I, 1978 and January I, 1981. Therefore, in order to check whether new laws is applicable for the specific application, the application has to be checked. Therefore, the reference item code to be set in the data area 2204 has to be the code indicative of the application date. If the specific application is filed before Janaury I, 1978, the step data section 2200 to be entered data of the first publication become invalid.

The data areas 2206, 2207 and 2208 are designed to receive entry of the step name, abbreviated step name and display name as set in the common tep rule section 206. It would be convenient to automatically enter the data in the data areas 2206, 2007 and 2208 in response to entry of the step number in the data area 2203.

A data area 2209 is provided for setting a process start flag code. The process start code flag is set for the first step of the sequence of steps in the step data block 2200 for indicating the first step. Therefore, for the steps to be performed subsequently to the first step, the start code data will never set. A data area 2210 serves as flag register for setting and resting an independent step indicative flag. Therefore, the independent indicative flag is set only for the steps. A data area 2211 stored data active

range of the independent step. Active range means identifies the relationship of the independent step to other steps. Therefore, identification of the active range of the independent step range data area 2211 prevents irregular order of data entry. A data area 2212 is provided for set/reset a flag indicative of repetition of step. Namely, when the subjective step has to be processed repeatedly, the step repeat flag is set in the data area 2212. A data area 2213 accepts setting of a flag indicative of presence of next step. When next step to go is present, the step number of the next step or steps are entered in data areas 2214.

Similarly to the aforementioned common step rule table 206, the data in the local step rule table can be modified as it become necessary by accessing the rule data file 20 through the keyboard.

Process of setting the steps in the local rule block 220 will be described herebelow with reference to Fig. 4, in which a step setting program is shown. In the step setting process, at first, a step set item will be selected from an initial menu (not shown) displayed on the display unit 3. Selection of meni item, i.e. step set item, is performed through the keyboard 2, at a step 1001. In response to entry of selection of the step set item through the keyboard 2, CPU becomes active to access the display data file 50 to read out the second menu display format for step set at a step 1002. The read step set menu is then displayed on the display unit 3, at a step 1003. The format of the display displayed on the display unit at the step 1003 is shown in Fig. 5. Utilizing the displayed format, step set is performed. At a step 1004, the state code (e.g. US as a code identifying the United States) is entered through the keyboard 2. For guidance of entry of the state code, a cursor 302 may highlight or blink at a block 301 on the display. Entered state code is written in the data area 2201 of the step data block 2200 of the local step rule table 208 through CPU I. At the same time, CPU transfers the state code data to the display unit 3 to indicate in the block 301. Therefore, the state code entered through the keyboard 2 is indicated in the block 301. Subsequently, the cursor moves to a block 3C which is designed for indicating the route code. A seen from Fig. 5, the route code block 303 is displayed with a guidance of the route code at the section 304. The cursor 302 then highlights or blink at the block 303 to require entry of their route code. The route code is thus enter through the keyboard 2 and written in the data area 2202 of the local step data block 2200 in the rule data file 20. At the same time, the entered route code is indicated in the block 303 of the display.

After the process in the step 1004, the CPU checks items to be set in the local step data block 2200 which is set for processing the application in the entered state through the selected route. For instance, in the shown example, CPU I accesses the local step data block 2200 in the rule data file, which is adapted to process the United States patent application through national route. Then, CPU I locates items having not been set, at a step 1005. Thereafter, at a step 1006, set items and non-set items are displayed in the column 305 on the display, where index of the items are displayed. Set and

non-set conditions are indicated in "Yes" and "No" in the column 306. In the shown embodiment, the indication "Y" indicates non-set items and "N" indicates already set items. Therefore, at the step 1006, the display changes from that in Fig. 5 to that in Fig. 6. With the display format as shown in Fig. 6, selection of step set and step select is made through the keyboard at a step 1007. Selection is at first performed by entry of "1" or "2" for selecting required operation between undating of the rule (newly setting or renewing or modifying of the rule) and selection of item through the index. In the shown example, the non-step set; F: period set; G: common step set; H: date set; and I: input for non-set item. On the display, the item E : step (individual) set and J: delete (individual) step are left blank. This blank indication means that these items can be selected irrespective of set and non-set conditions of the steps. Since these items are directed for treatment for individual step, when these items are selected, selection has to be made with identification of the step to be treated. Therefore, entry of the step number is required. The step number entered through the keyboard is displayed in the block 308 on the display. The selection command "1G" is entered through the keyboard 2. This means that the required job is updating of the common step rule table 206. CPU I thus displayes the selected job indication in a block 307 and accesses the common step rule table 206.

In order to perform newly setting the common step rule table 206 or local step rule table 208 or modifying those tables, one of the job items "1G", "1D", "1E" and "1I" is to be selected at the step 1007. If the job item "1G" is selected as illustrated, updating of the common step rule table 206 is performed subsequently. On the other hand, when the job item "1D" is selected selection of the local step rule table 208 is performed and when the job items "1E" or "1I" are selected, updating of the local step rule table is performed. Therefore, CPU checks the entered job code at a step 1008. When entered job code is "1G" process through the steps 1009 to 1012 is performed. On the other hand, if the selected job code is "1D" process through steps 1013 to 1016 is performed, and if the selected job code is "1E" or "1I", process through the steps 1017 to 1025 are performed.

In the process through the steps 1009 to 1012 for updating the common step rule table, the common step rule table 206 is accessed and at the same time, the display format adapted for updating of the common step rule table, as shown in Fig. 7 is read out from the display data file 50, by CPU I. The read display format is displayed on a display unit 3 at a step 1010. Utilizing the display of Fig. 7, each step forming part of the common steps is entered at a step 1011. Entry of the common steps is performed by inputting the step numbers in the block 2101 and inputting step names, abbreviated names and display names in the blocks 2102, 2103 and 2104. By repeating entry, the common step rule table is updated, at a step 1011. During this process, the display in the format of Fig. 7 is updated everytime entry of one step is completed. After completing entry of all of the steps to be entered the common

step rule table 206 is again stored in the rule data file 20 at a step 1012. After the step 1012, process goes END and display is return an initial display format to be ready for accepting other jobs.

On the other hand, when the job item "1D" is selected at the step 1007, the process enters the sequence of steps 1013 through 1016 for selecting steps from the common step rule table 206 necessary for prosecuting the application in the state and route identified in the step 1004. In order to allow selection of the steps from the common step rule table 206, CPU accesses a display format adapted to perform step selection for formation of the local step rule table 208 with respect to the identified state and route, at a step 1013. Therefore, the display format as shown in Fig. 8 is displayed on the display 3 at a step 1013. As will be seen from Fig. 8, the display is constituted column 310 for accepting entry of number, such as "01" for selecting each common step, a column 311 showing steps already selected, a column 312 indicating the step numbers and a column 313 indicating step names. In the shown example, the steps "001 = filing application and receiving official filing receipt"; "201 = receiving an office action on the merit for the application in the United States and Canada"; "202 = filing a response to the merit office action in the United States and Canada", "203 = receiving a final office action in the application in the United States and Canada"; and "204 = filing an amendment under the United States Rule 1.116 in response to the final office action in the United States" are already selected. This is indicated in the column 11 in a form of "01". As will be seen from Fig. 8, the steps indicated "00" in the corresponding column 311 are not necessary step for prosecuting the patent applications in the United States. Therefore, these steps are not included in the local step data block 2200 adapted to prosecute the applications in the United States through the national route. As will be appreciated, the step selection is performed in view of the patent laws, patent practices and so forth in the subjective country to file the application. Therefore, if the laws or practices is changed, modification of the local step data block 2200 for the subjective country becomes necessary. For instance, in the shown embodiment, when the United States revises the patent laws and introduces a system for performing examination in response to the applicant's request, which may corresponds to "request for substantive examination", then, the step "008" has to be incorporated in the local step data block 2200 for prosecuting the national route application in the United States. Therefore, in such case, entry through the keyboard 2 has to be made for additionally selecting the step "008" by entry of the number "01" in the corresponding column 310, at a step 1015. Entry of selection code which is number e.g. "01", is repeated until all of the necessary steps are selected. Everytime of completing selection of one step, display of Fig. 8 is updated. After completing selection of all the necessary steps, the local step data block 2200 is stored in the local step rule table 208 of the rule data file 20, at a step 1016. Then process goes END.

It should be appreciated that, in some state, it will become necessary to require different process in the steps identified by the same step number and step name. In such case, mutually distinct steps has to be set under the same step number and step name. In such case, the number of steps to be indicated at the corresponding column 3II becomes "02". In other words, when one step is already selected in the local step data block as single step, this can be made two by indicating the increased number of step, e.g. "0I" in the column 3I0. In such case. the updated number of the step becomes "02" in the column 3II. In order to distinguish the different steps under the same step number and the step name, the step number in the local step data block 2200 is set as five digit code. The five digit code is formed with the first three digit indicating the step code as used in the common step rule table 206 and the last two digit identifying one of a plurality of steps to be identified the same step number of the common step rule table. For example, when the step 202 is additionally selected to have two mutually distinct steps under the step number "202" and step name "RESPONSE (MERIT) (US/CA)", respective steps are distinguished each other by giving distinct local step numbers "2020I" and "20202".

In the process through the steps I0I7 to the step I025, updating of the local steps is performed. Updating of the local steps is performed utilizing the display formats as shown in Figs. 9 and I0, which display formats are selected from the display data file 50. Therefore, when the job code as checked at the step I008 is "IE" or "II", CPU I reads the display format of Fig. 9 at the step I0I7 and displays on the display 3 at a step I0I8. Against the display format of Fig. 9, data input to the necessary items is performed at a step I0I9 through a keyboard. As a guidance for the entry of necessary data, cursor 302 may highlights or blink respective items to require entry data is used. The cursor 302 may move among various entry blocks in a given order.

As will be seen from Fig. 9, setting of the local steps is performed by entry of reference date code, i.e. one of application date ("I"). second publication date ("2"), the issue date ("3") and the effective date ("4") according to the guidance in the column 320. Among the reference dates as indicated in the guidance in the column 320, the "effective date" means a date on which the step action starts. For instance, in case of an U. S. office action, the mailing date will be treated as the effective state on which the office action processing step becomes in effect. The reference date is set in the column 32I on the display of Fig. 9 through the keyboard. In response to setting of the reference date, the cursor 302 moves to the column 322 to require entry of the beginning date of the legally effective term of the subjective step. Therefore, the beginning date of the legally effective term is set in the column 322. Subsequently. the end date of the legally effective term is set in the column 323. By setting the beginning date and end date in the columns 322 and 323. the term in which the subject step is defined This means that when the application has a reference date. e.g. application date ("I") in the shown

case. within the legally effective term, the subject step is available in prosecuting the application. On the other hand, if the reference date is out of the term, the subject step has to be avoided in prosecuting the application. In the shown example "000000" is set in the column 322 and "999999" is set in the column 323. This means that the subject local step ("00I0I" = FILING/FILING RECEIPT) is always available to prosecute the applications filed in any date. The step name. abbreviated name and display name in the column 324 may be automatically indicated in relation to the step number of the subject step. If necessity happens to change one of the step name, abbreviated name and display name, it would be possible to access the corresponding column through the keyboard and update the indications of the corresponding columns.

Subsequently, start flag, the independent flag, the step repeat flag and the next step flag are set respectively in the blocks 325, 327, 330 and 332 guided by the guidance in the columns 326, 328. 33I and 333. When the independent flag is "N" and thus indicates that the step has some relationship to other steps in view of the procedure of prosecution in the subject state, the step range only in which the subject step processing occurs is set by the step numbers of the beginning step and end step of the step range.

After completing entry of the required data against the display format of Fig. 9 at the step I0I9, the updated step is stored as part of the sequence of steps in the local step data block 2200, at a step I020. Thereafter, the next step flag in the block 332 in the updated step is checked at a step I02I. If "N" is set in the block 332, process goes END. On the other hand, when "Y" is set in the block 332, CPU I accesses the next page of the step set display format, which next page may be in a format of Fig. I0, for accepting entry of the next step data, at a step I022 and display the accessed display format of Fig. I0 on the display at a step I023. As will be seen from Fig. I0, the display format as displayed at the step I023 is in a form of a list corresponding to the loc steps set in the local step data block 2200. The nex steps are selected among the listed steps. which next step possibly occur subsequently of the subject step. For instance, in the shown example, the subject step is "00I0I = FILING/FILING RECEIPT", possibly occurring steps are "20I0I = OFFICE ACTION (MERIT)" and "5I00I = NOTICE OF ALLOWANCE". Therefore, these terms are selected as the next step to the step "00I0I". Selection flags "Y" are thus set in the corresponding columns 334 on the display, at a step I024. This process is performed until all of the possible next steps are entered. During this process, display in a format of Fig. I0 is updated everytime one next step is set. After all of the possible next steps are set through the steps I023 and I024. process goes END. By the process as set forth above, the step tables for processing each individual applications can be established in the rule data file 20.

Utilizing the rule data file 20 as set forth above, process or step of prosecution of each individual application to be filed in various countries are

managed or controlled. The management or control of prosecution of applications, includes updating data with respect to respective applications, watching process operation in the applicant, in the agent and so forth, issuing instructions to the agents are included. Updating of data with respect to individual application, includes entry of in-coming jobs, such as response to an office action issued for the subject application, payment of issue fee or other necessary fee, and so forth are included.

On the other hand, as set forth above, the rule data file 20 further includes the time-control table 204 storing data necessary for setting due date, extended response term and so forth according to the laws and rules in respective countries to file the application. As is well known, the term calculation, term allowed for responding to an office action and so forth are different in different countries. Therefore, in order to make up the time-control table 204, it should be preferable to establish a plurality of tables for performing timer control in respective countries. According to the present invention, the memory area provided for the time-control table 204 is thus divided into a plurality of memory blocks, each of which is adapted to store one table designed for prosecuting application in one country. The table established with respect to the corresponding country and route to file the application will be hereafter referred to as "local time-control table". Similarly to the rule table 202, the timer-control table 204 can be updated upon modification of the table becomes necessary.

Fig. II shows a flowchart of a time-control table setting program to be triggered when time-control table is to be updated. When the time-control table setting program is triggered at a step II0I by entry of a command through the keyboard 2, CPU accesses the display data file 50 to read out the display format. At this time, CPU I selects the display format of Fig. 5 for allowing selection of required job. Therefore, the display format of Fig. 6 is then displayed on the display 3 at a step II03. For updating the time-control table 204, the item "IF" is to be entered through the keyboard 2. Therefore, at a step II04, the state code and the route code are entered through the keyboard 2. The input job code is displayed in the block 307 on the display, as shown in Fig. 6. In the shown example, the "US" is entered as the state code selecting the United States and "0" is enetered as the route code selecting the national route. In response to the entry of the state code and the route code at the step II04, CPU performs serach for finding out non-set items at a step II05. Therefore, the non-set items are displayed on the display in a format of Fig. 6. At this display condition, the job code "IF" is entered through the keyboard 2, at a step II07 in order to enter into time-controlling setting routine. The entered job code is checked whether it is "IF" demanding the time-control table setting operation or other operations, at a step II08. If the job code entered is other than "IF", the operation enters into demanded operation other than time-control table setting operation. On the other hand, when the entered job code is "IF" and thus updating of the time-conmtrol table is demanded.

Then, at a step II09, CPU I accesses a display format of Fig. I2 for accemting entry of information for calculating term with respect to actions identified by step code, which display format is stored in the display data file 50. The selected display format of Fig. I2 is displayed on the display 3 at a step IIIO. As will be seen from Fig. I2, the display format of Fig. I2 includes blocks 340, 34I, 342, 343 for accepting entry of the time-control data. The blocks 340 and 34I are adapted to accept data of start of the term to be set, For instance, the block 340 is adapted to accept step number, e.g. "20I" of the step at which the term starts. Similarly, the block 34I is adapted to accpet date code. e.g. "20I" as a begining date of the term. The blocks 342 and 343 are adapted to accept the data of end of the term to be set. For instance, the block 342 accepts the step number for identifying a step in which the date data stored in the undermentioned block 343. The block 343 accepts end date data for taking the action identified in the block 342. In the example of Fig. I2, since the step number of the bigining step number is "20I", indicative of occurence of an office action, the end step number is "2010I" indicative of the receipt of the office action in the local step rule blocl 206. The end date data then indicates "202" indicative of the final due date for responding to the office action.

The display format of Fig. I2 further includes blocks 344, 345 and 346 for accepting term data and extension data. In case of the shown example, since the U. S. examiner usually allow three-month shortened statutory period, i.e. 6 months for responding to an office action on the merit, the block 344 is set as "00 03 000" In this entered data, first two digit indicates year factor, second two digit indicates month factor and last three digit indicates day factors. Therefore, the data entered in the block 344 indicates 3 months period from the mailing date of the office action.

Data entered in the block 345 indicates an unit extension term obtainable for responding to the office action. Similarly to the foregoing response period data in the block 344, first two digit indicates year factor, second two digit indicates month factor and last three digit indicates day factors. On the other hand, the block 346 accepts two digit data indicative of possible maximum occurence of extension for extending the term for responding to the office action. These data are set in respective blocks 340, 34I, 342, 343, 344, 345 and 346 through the keyboard at a step IIII. After setting the data in the local time-control table for prosecuting the U. S. Patent application through national route, the updated local time-control table is stored in the corresponding memory block in the rule data file 20. For instance, in the example of Fig. I2, when the office action on the merit is received from the United States Patent and Trademark Office for the U. S. Patent applcation through the national route, the due date is calculated as 3-months of the mailing date of the office action according to the information set in the block 344. Expension data may be entered for three times as required or requested. Everytime the expension is set, the due date is extended for one month.

Figs. 13 and 14 show data format stored in the time-control table 206 of the rule data file 20. The local time-control table in the time control table 204 is searched with respect to the state and route. Based on the identified state and route, an index of Fig. 14, which corresponds to the designated state and route, is accessed. With the accessed index file, one of the set files, e.g. "HEADER SET FILE", PATENT TERM SET FILE", "NUMBER SET FILE", "PERIOD SET FILE" and so forth, is accessed. In order to calculate the due date, the item of "PERIOD SET FILE" is accessed to read out the set data in the local time-control table. By this, the local time-control table of the corresponding state, corresponding route, and corresponding step is read out. The read out part of the local time-control table is as shown in Fig. 14. As shown in Fig. 14, each data to be identified by entry of the step number, e.g. "20101 (= office action on the merit)", is constituted due date calculation data in a block 350 and extension period calculation data in a block 351. The shown example in Fig. 14 corresponds to the data entered against the display of Fig. 12 as set forth above. Based on the mailing data of the office action as entered as a reference date, and due date calculation data and extension period calculation data, due date for responding to the office action and extended due date can be calculated.

Actual process in calculation of the due date and extended due date will be discussed later with respect to a time-control program to be performed by the preferred embodiment of the system.

According to the preferred embodiment as set forth above, since the data for calculation of the due date can be read out by identifying the corresponding step number, it simplifys setting of the time-control date for each individual application siginificantly. Furthermore, since the aforementioned due date and extended due date calculation as internal process in the system becomes simpler to significantly shorten the process period.

With utilizing the rule table 202 and the time-control table 204 in the rule data file set as set forth above, management for each individual patent application is performed.

As will be appreciated, after setting the rule data file 20, particulars, such as applicant's docket number or reference number, basic application data, title of the invention, identification of the inventor or inventors, states to file the application, route to be taken to file the application, identification of man in charge of the application, agent to be appointed and so forth are set in the case file 10 with respect to each ivention or application. Entry of subsequently occurring data, such as filing date, application date, first publication number, first publication date, occurence of office action and so forth are controlled or managed accroding to the rule set in the local step rule table 208 and the local time-control table in the time-control table 204. Furthermore, time-control for watching process in preparation of application, preparation for office action and so forth is performed by the preferred embodiment of the managing system according to the invention. In order to store the entered data with respect to each

individual · application, the case data file 30 is constitued by a plurality of individual data blocks 310, each of which is adapted to store the file data of each individual application. Each of the data blocks 300 provided in the case data file 30 is in a data format as shown in Fig. 16 and will be hereafter referred to as "case file 300. As will be seen from Fig. 16, each of the case file 300 includes a block 360 for accepting an applicant's docket number or reference number. A block 362 is provided for receiving the state code. A block 363 is adapted to receive filing particulars, such as basic application number, based on which priority right under Paris convention has to be claimed, the basic applicationm date, title of the invention, inventors' names, filing date, application number, first publication date, first publication number, second publication date, second application number, issue date, patent number, agent's name, agent's docket number, indication of family application filed in other countries, and so forth. The case file 300 also has a file history storing section 367 for storing hysterisis of prosecution · application. The file history storing section 367 · constructed by a column 363 to be set step numbers, a column 364 to be set a date of entry of data with respect to the corresponding step, a column 365 to be set a data number which is set in order of entry, and a column 366 to be set a date as a occurence date data. In the shown example, the entered step number "00101" identifies the filing of the application. As indicated in the column 366, the application has been filed on January 2, 1984. This filing data has been entered as a first data on Janauary 4, 1984. Likewise, the hysterirsis data will be accumulated in the file history storing section 367 of the case file.

For an example, process in taking care of an office action will be described herebelow with reference to Figs. 15 through 20. Fig. 15 is a flowchart of an office action data setting program which has to be triggered for setting data concerning office action, such as due date, intermediate dates in processing office action and so forth. Upon entry into process the office action data setting program of Fig. 15, t₁ keyboard 2 is operated to access an item of setting of office action data against an initial menu initially displayed on the display 3, at a step 1201. In response to selection of the item of the setting of office action data through the keyboard, CPU 1 becomes active to access a display format of Fig. 17, at a step 1202. The selected display format of Fig. 17 is displayed on the display 3 at a step 1203. Here, the case number (applicant's reference number, e.g. "S84PI00US00") is set in a block 370 on the display format through the keyboard 3 at a step 1204. At the same time, at the step 1204, a selection item "I" or "2" is set in a block 371 on the dispaly 3 through the keyboard. These selection item indicates newly set of the step data ("I") or modifying of the already set step data ("2").

The entered selection item ("I" or "2") is checked at a step 1205. If ther selection item is "I" and thus indicates demand for newly setting step data, process through the steps 1206 to 1209 is performed. On the other hand, when the entered selection item

is "2", the process through the steps l2l0 to l2l3 is performed.

In the process through the steps l206 to the step l209, the case file 300 in the case data file 30 of the corresponding application as identified by the applicant's reference number set in the step l204 is searched to find the last hysterisis, at the step l206. Namely, in the step l206, the dates set in the column 364 of the subject case file 300 is searched. This process is intended to know the last step in progress of the prosecution of the application so as to avoid illogical entry of data for the wrong item. After fining out the last hysterisis at the step l206, the step number set in the column 363 with respect to the most recent date in the column 364 is read out from the file history storing section 367 of the case file 300. At a step l207, the local step rule table 208 in the rule data table is searched to find out the corresponding step. With respect to the searched step in the local step rule table 208, the data concerning the next step or steps in the blocks 334 in the local step rule table of Figs. 9 and l0, are read out at the step l207.

In the shown example, the last hysterisis is filing of the application and receipt of an official filing receipt as identified by the step number "00l0l" as shown in Fig. l6, the next step as identified in the U.S. local step rule table 298 is receiving of an office action as identified by the step number "20l0l" or receiving of a notice of allowance as identified by the step number "5l00l". At the same time, in the step l208, all of the steps independent of other step as indicated in the block 327 of the display format of Fig. 9, are read out. Therefore, the CPU l operates the dispaly control section in the control section 60 for modifying the display format of Fig. l7 to that of Fig. l8.

As will be seen from Fig. l8, the modified display includes indications of next steps in a column 372 and independent steps in a column 373. These indications of the next step and the independent steps show the status of the application and data to be input. Therefore, the operator can be guided by the guidance indication on the display 3.

On the other hand, when renewal of the already set step is designated by entry of "2" in the block 37l of the display format of Fig. l7, process goes to the routine of steps l2l0 to l2l3. At the step l2l0, CPU l accesses the file history section 367 of the case file of the application identified by the reference number set in the step l204. Then, the hysterisis of the application is read out. Based on the read hysterisis, CPU l performs serach against the local step rule table 208 of the corresponding state and route, in order to read out the step name or names corresponding to the step number or numbers read out at the step l2l0, at a step l2ll. Then, at a step l2l2, CPU l prepares modification of the display format of Fig. l7 to indicate the hysterisis of the subject application in a column 374 on the display, as shown in Fig. l9. The display format as modified at the step l2l2 is displayed on the display 3 at a step l2l3. As will be seen from Fig. l9, since only step "00l0l (= filing application and receiving of an official filing receipt)" has already been set with respect to the application identified by the reference number "S84Pl00US00"

as shown in Fig. l6, the step number "00l0l" and the step name "FILING/FILING RECEIPT" is displayed on the display 3 at the step l2l3.

After the step l209 or l2l3, process does to an updating routine of steps l2l4 through l2l8. At first, at the step l2l4, against the display format of Fig. l8 or Fig. l9, with utilizing the step number and step name displayed on the display as the guidance, a step nummber for identifying the step to update is entered through the keyboard 2. At a step l2l5, CPU l accesses the display data file to locate a display format adapted for accepting entry of data for the step identified at the step l2l4.

When the entered step number at the step l2l4 is "20l0l" for entry of an office action data, CPU selects a display format of Fig. 20. Fig. 20 shows a display format for accepting data indicative of progress in handling office action. The display format includes a block 375 for accepting entry of an official mailing date of an office action. In the shown example, the indication in the block 375 shows that the office action was mailed on December l, l985. The display format further include blocks 376 for accepting date data of agent's mailing date, blocks 377 for accepting date date of receipt of the office action in the applicant, blocks 378 for accepting proposed date data by which the agent wants to receive instructions for responding to the office action. Blocks 379 for entry of occurence of extension for the response period, and blocks 380 to be set a due date. Furthermore, the dispaly format includes blocks 38l for entering date data for instruction date and blocks 382 for receiving entry data of filing a response to the office action.

The display format of Fig. 20 further has a block 383 for accepting entry of a mailing date of a final office action, a block 384 for accepting entry of agent's mailing date of the final office action, a block 385 for accepting entry of applicant's receipt date, a block 386 for accepting proposed instruction date set by the agent, a block 387 for setting occurence of extension for the response term to the final office action, a block 388 for accepting entry of due date, a block 389 for accepting entry of instruction date on which instructions is given to the agent, and a block 390 for accepting entry of response date on which a response to the final office action is submitted. Furthermore, the display format is adapted to receive interference data, i.e. dates of occurence of interference in blocks 39l, a terminal disclaimer data, i.e. indication of relevant case number, instruction date, and submission date, in blocks 392, 393 and 394, and a disclaimer data, i.e. instruction date and submission date, in blocks 395 and 396 In addition, the display format includes blocks 397 and 398 resepctively adapted to accept command for outputting a letter to the agent and for entry of information concerning the references cited in the office action.

The display format of Fig. 20 is displayed on the display 3 at a step l2l6. Against the display format as displayed at the step l2l6, entry of data indicative of progress in processing the office action is performed, at a step l2l7. Process in the steps l2l6 and l2l7 are repeated until all data are entered After completing entry of all data, the office action data

entered is stored in the case file. At the same time, the file history storing section 367 is undated.

During process in processing the office action, the office action data to be set against the display format of Fig. 20 has to be updated from time-to-time according to the progress in treatment. FIG. 21 shows a subroutine to be triggered in the process of the step 1217 and 1218 of the program of Fig. 15.

In the step 1216, the selected display format of Fig. 20 is displayed on the display 3. At a step 1312, data entery is performed. At this step, entry of the official mailing date, agent's mailing date and receipt date in the blocks 375, 376 and 377 is performed. In the shown example, the office action is mailed from the United States Patent and Trademark Office on September 25, 1985. Therefore, the PTO mailing date is set as "850925 in the block 375. Simultaneously, the agent's mailing date, e.g. October 1, 1985 ("851001") and the receipt date, e.g. October 9, 1985 ("851009") are set in the blocks 376 and 377 through the keyboard 2. Also, in the shown example, the agent requires the applicants instructions for responding to the subject office action by December 25, 1985 ("851225"), this date data is set in the block 378 as the agent proposed date. After the step 1312, the state file is accessed at a step 1313 to locate the state data and route data. After this, at a step 1314, the local step rule table is searched in terms of the located state code, the route code and step number. For instance, in the shown example, since the application has been filed in the United States through the national route, the item of the state code "US" and the route code "0" is selected at the step 1313. After this, period set file in the table of Fig. 13 is selected at a step 1315. In response to this, the time calculation table of Fig. 14 is selected. Utilizing the calculation table of Fig. 14 and the set data, the due date for responding to the subject office action is derived at a step 1316. Namely, in the U. S. Patent practice, the usual 3-month response period starts from the official mailing date, e.g. September 25, 1985. Therefore, this date in the block 375 is taken as the "FROM" date data. Then, the data "00 03 000" set in the calculation table is read out and (Y due date) = from date + "00 03 000) is calculated for deriving the due date in the step 1316. Then, based on the derived due data, the display format is modified at a step 1317 and displayed on the display at a step 1318. At this time, the modified display format incorporates the due date data in addition to the data entered at the step 1312.

To the modified display made at the step 1318, extension data is entered at a step 1319. In practice, the entry of the extension data is done by setting "Y" in the block 379 of the displayed format through the keyboard 3. When the extension flag "Y" is set in the block 379, the CPU retrieves the extension data in the local step rule table 208, at a step 1320. In practice, the CPU checks the maximum length and number of unit term extensions available for responding to the office action. In practice, the statutory period in prosecution of the U. S. Patent application for responding to the office action is 6 months, and most U. S. examiners set shortened statutory periods of 3 months. Three additional one

month extension may be allowed. Therefore, maximum number of extensions in U. S. Patent application is 3.

As is well known, in United Kingdom Patent applications, extension of response period are generally not avaiable. Therefore, the local step rule table 208 for the United Kingdom national route application will have no data about extension in the block 345 and 346 in the local time-control table set for the United Kingdom Patent application. Therefore, when extension flag "Y" is set for the United Kingdom Patent application, this is clearly wrong. Therefore, such an entry must be rejected or an error indication displayed.

In order to assure this, CPU checks the local time-control table at a step 1321. If the extension flag is set at the step 1319 but no extension data appears in the blocks 345 and 346 in the local time-control table of Fig. 12, error an indication is displayed in a block 399 in the display format of Fig. 22, at a step 1322. On the other hand, when extension data is set in the blocks 345 and 346 of the local time-contr table of Fig. 12, a new due date is calculated an derived based on the extension data in the blocks 345 and 346 of the local time-control table of Fig. 12 and already set due date, at a step 1323. After this, the final due date with all possible maximum extension is also derived at a step 1324. The new due date Y_E as derived at the step 1323 is compared with the final due date Y_Z derived at the step 1324, at a step 1325. When the new due date Y_E is earlier than equal to the final due date Y_Z, the new due date is displayed in the block 380. On the other hand, when the new due date Y_E is later than the final due date Y_Z as checked at the step 1324, then error indication is given in the block 399, at a step 1327.

In the shown embodiment, the extension flag "Y" is erased after setting the new due date after a time extension. Therefore, the due date is extended by setting the extension flag "Y" in the block 379 everytime the extension of the response period becomes necessary. As set forth above, when extension is not allowed in the subject country when too many extensions are made causing t error sign to be displayed, the extension flag "Y" may be canceled. By cancellation of the extension flag, the last set due date is displayed in the block 380.

During prosecution of the application, the necessity of sending instructions or request letters for the agents may arise. In order to process various letters according to the progress of prosecution of application, the document data file 40 and documenting control section and documenting item-access control section in the control section 60 are provided. So as to process the letters. a documenting control program of Fig. 23 is set in the preferred embodiment of the system. The documenting control program is in practice accessible at various steps of prosecution of applications In Fig 23, there have been illustrated two routes for accessing the documenting program. For instance, one route for accessing the documenting control program is subsequent to processing of the office action data processing as set forth with respect to the flowchart

of Fig. 15 or Fig. 21. The office action data processing contains various steps as set out with reference to Fig. 15 and Fig. 21. These steps has have been schematically shown as the previously disclosed steps 1401 through 1406.

The important thing to note with respect to the routine through the steps 1401 to 1406, is that setting of letter flag "Y" is performed at input stage. The letter flag is checked at step 1406. When the letter flag "Y" is not set in the block 397, process goes to end. On the other hand, when the letter flag "Y" is set in the block 397 during input stage at the step 1405, process enters into the documenting routine of steps 1409 to 1418.

In the other route, the letter processing routine of steps 1409 to 1418 is triggered by accessing the corresponding item through a menu in Fig. 24. Therefore, at a step 1407, a documenting item selection menu of Fig. 24 is displayed on the display. From the documenting item selection menu of Fig. 24, desired document item is selected through the keyboard 2 at a step 1408. At the step 1408, a reference number is entered for identifying the application, about which the letter has to be prepared.

In the shown example, the letter flag "Y" is set in the block 397 at the step 1405 after entry of data for processing office action or the item "12 (= IN- STRUCTIONS FOR RESPONDING TO OFFICE AC- TION/OPPOSITION)" is selected at the step 1408, a common display format of Fig. 25 is selected from the display format stored in the display data file, at step 1409. As will be seen from Fig. 25, the common display format for processing of letters relating to office actions and oppositions can be utilized for preparation of various letters. After this, the case data is searched in terms of the identification of the reference number entered at the step 1402 or 1408, and at a step 1411, and the case data of the identified application in the case file 30. By accessing the local case file at the step 1410, the agent to whom the letter will be sent, date to be indicated on the letter and so forth can be picked up. Similarly, by accessing the master file 10, man in charge of the subject application, address and so forth above the identi- fied agent and so forth are picked up.

As will be seen from Fig. 25, the reference number, e.g. "S84PI00US00" is set in a block 400 as set at the step 1402 or 1408. The date to be indicated on the letter and as read from the local case file at the step 1410 is set in a block 401 of the display format. Similarly, the title of the invention, name or initial of the man in charge of the subject application, and agent's name are indicated in blocks 402, 403 and 404. The display format further includes selection blocks 405 to 409 for selecting content to be included in the letter. Furthermore, the display format of Fig. 25 further includes sub-blocks 410 to 416 to be selected when the corresponding items are selected through the blocks 405 to 409 for selecting sub-items to be included in the letter.

Selection of the items is performed at a step 1413 through the key board. In the shown example, the items are selected by setting "Y" in the blocks 405 and 406. By settting "Y" in the block 405, the

sentence "WE ACKNOLEDGE RECEIPT OF YOUR LETTER .... ENCLOSING THE FOLLOWING DO- CUMENT(S)." is selected. The kind of document to be indicated subsequently to the foregoing sen- tence may be selected by setting "Y" in one of the sub-blocks 410, 411 and 412 for selecting "OFFICE ACTION", "THE GROUND OF OPPOSITION" or "THE REFUTATION OF OPPOSITION". Since the "Y" is set in the block 410, the office action is selected as the document to be indicated. In the letter the date to be indicated in the blank corresponding to the block 401 is picked up from the local case file 30 as set forth above. In the shown example, since the office action is mailed from the agent on June 6, 1985, the corresponding data "85I00I" is picked up from the local case file and inserted in the block 401. Therefore, the completed sentence is to be read:
"We acknolwedge receipt of your letter on June 6, 1985 ("85I00I") enclosing the following document(s).

Office Action"

Similarly, since the "Y" is set in the block 406, the sentence "ENCLOSED ARE OUR COMMENTS ON THE ABOVE ACTION ......" The blank in the last section of the sentence can be filled by picking up date information, i.e. official mailing date, September 25, 1985 from the local case file 30. Therefore, the completed sentence would become:

"Enclosed are our comments on the above action September 25, 1985 ("850925")

After selecting the contents of the letter at the step 1413, CPU searches the document data file for the corresponding letter format at a step 1414. As a result of this search, the letter format of Fig. 26 may be selected. Then, the local case file is searched again at a step 1415 for variables to be contained in the letter to be prepared utilizing the letter format of Fig. 26. Similarly, at a step 1416, the case data in the case in the case file 30 is searched for variables to be contained in the case. In practice, the the agent's mailing date, e.g. "85I00I" to be inserted in a block 420, the kind of action, i.e. "Office Action" to be inserted in a block 421; and the due date, e.g. "851225" to be inserted in a block 422 are picked up from the local case file 300, at the step 1415. On the other hand, the name of an attorney, e.g. "Mr. A" and agent's firm name, e.g. "A LAW FIRM" and firm address, e.g. "Suite IIII, I828 L Street Northwest, Washington, D.C. 20036-5I04, U. S. A." to be inserted in blocks 423, 424 and 425, application number, e.g. "06/123,456" to be inserted in a block 426, and agent's docket number, e.g. "0I2345" to be inserted irra block 427 are picked up from the case data in the case file 30.

After completing insertion of the variables, layout of the selected document is performed at a step 1417. The processes through the steps 1414 to 1417 are repeatedly performed until all variables are entered in the letter format of Fig. 26. After completing layout, the printer 4 is activated to obtain print out of the letter. During the layout process in the step 1417, all the information in a particualr form, such as

"850925", "85l00l" are converted into usual forms, i.e. September 25, 1985, October l, l985 and so forth.

As will be appreciated herefrom, preparation of letters to be sent to the agents can be significantly simplified by allowing choosing of necessary date from the local case file, case data in the case and so forth.

While the present invention has been disclosed in terms of the preferred embodiment in order to facilitate better understanding of the invention, it should be appreciated that the invention can be embodied in various ways without departing from the principle of the invention. Therefore, the invention should be understood to include all possible embodiments and modifications to the shown embodiments which can be embodied without departing from the principle of the invention set out in the appended claims.

Claims

l. A system for managing preparation and prosecution of applications to be filed in various countries for protection of industrial property rights, comprising:

first memory means for storing information concerning each application, including identification of application and identification of country in which the application is filed;

second memory means for storing rules for controlling processing of applications throughout preapration and prosection of the application, said rule being established with respect to each country the applications are to be filed for defining order of steps to be taken during preparation and prosecution of the application and for establishing a time table for due dates for taking action with respect to the corresponding country and accessible by identifying the country in which the application is filed;

third means for displaying necessary information and guidance for processing the application including entry of data according to the rule stored in said second means; and

fourth means for allowing entry of data and commands for operating the managing system and controlling updating of contents in said first and/or second memory means.

2. A system as set forth in claim l, wherein said first memory means further comprises a local case data file having a plurality of file pages each storing case data of each corresponding application, said case data including data indicative of history of the application and current status of the application.

3. A system as set forth in claim 2, wherein said second memory stores said rule including a rule for selecting one or more next step with respect to current status of the application.

4. A system as set forth in claim 3, wherein said rule in said second memory means comprises a rule table set with respect to each

country in which the application is filed and accessible by indentifying the country, and said rule table can be updated through said fourth means.

5. A system as set forth in claim 4, which further comprises fifth memory means for storing a plurality of display formats to be displayed on said third means, and said second means storing said rule including a rule for selecting one of said display formats according to the step to entry data.

6. A system as set forth in claim 5, wherein said second memory means stores data with respect to each of a plurality of steps in each rule table, each of steps in said rule table are identified by a step number given thereto.

7. A system as set forth in claim 4, wherein said second memory means further comprises a common step table containing all of the necessary steps for preparation and prosecution of applications in all the countries in which the application is to be filed, each step in the common step table is given step number for identifying the step, and said rule table for each country is established by selecting the steps in said common step table in sequence according to normal procedure to be taken in preparing and prosecuting the application in the subject country.

8. A system as set forth in claim 7, wherein said steps in said common step table and said rule tables are accessible through said fourth means by entering step numbers given to respective steps for identification thereof.

9. A system as set forth in claim 8, wherein said step number to be given to each of steps in said rule table has first component common to said step number of each corresponding step in said common step table and second component independent of the step number of the corresponding step in said common step table for distinguishing the steps in said rule table from the corresponding step or steps in sai common step table.

l0. A system as set forth in claim 9, wherein said rule table in said second memory means further contains term calculation data for calculating and deriving due date with respect to a reference date in each step, said term calculation data being accessible by identifying step by entry of step number through said fourth means.

ll. A system as set forth in claim 9, wherein said rule table contains data indicative of effective period of each step therein in view of the laws and/or rules in the subject country, said effective period being defined by the starting date data and ending date data of said effective period.

l2. A system as set forth in claim ll, wherein said effective period set in said rule table with respect to each step in said rule table is set in terms of a reference date, and said effective period data being associated with an identification of said reference date.

13. A system as set forth in claim 12, wherein said fourth means compares an input date corresponding to said reference date with said starting date data and ending date data in response to entry of said step number for checking whether the updating of step date for the step identified by entered step number is valid or not, so that said step data can be updated only by the valid data.

14. A system as set forth in claim 9, which further comprises fifth memory means for storing a plurality of display formats to be displayed on said third means, and said second means storing said rule including a rule for selecting one of the display format of the step at which data is to be entered.

15. A system as set forth in claim 14, wherein each of said display formats is accessible by identifying step in said rule table by entry of said step number.

16. A system as set forth in claim 9, which further comprises sixth memory means for storing document printing format data which is accessible by identifying the step for preparating letters.

17. A system as set forth in claim 16, wherein said printer document data stored in said sixth memory means comprises a first component containing a plurality of fixed letter formats commonly used in various steps and for various applications in various countries, and second component adapted to accept specific variables with respect to subject step and subject application.

18. A system as set forth in claim 17, wherein said second component stored in said sixth memory means is a letter format taking said specific variable as a part of the letter.

19. A system as set forth in claim 18, wherein said fourth means picks up variables from the corresponding file page of said local case data file in said first means for automatically completing said letter in said second component.

20. A system as set forth in claim 19, wherein said fourth means further picks said variables to constitute part of said letter of said second component from said information stored in said first memory means.

21. A system for managing preparation and prosecution of applications to be filed in various countries for protection of industrial property rights, comprising:

first memory means for storing information concerning each application, said first memory means comprising database file including identification of each application, identification of country in which the application is filed, filing particulars and so forth;

second memory means for storing a rule table for controlling processing of application throughout preapration and prosection of the application and a time table for controlling calculation of the term, said rules being established with respect to each contry to file the applications for defining order of steps to be

taken during preparation and prosecution of the application, said steps in said rule table being identified by given step numbers and for establishing a time table for determining due dates for taking action with respect to the corresponding country and accessible by identifying the country and step number of corresponding step set in said rule table in the process of application;

third means for establishing case data file containing a plurality of file pages, each of which is adapted to store file data with respect to subject application, said store file data including a history data showing the histroy of preparation and prosection and current status of the subject application, each file page of said case file further including data showing due date for taking necessary action derived based on entered data according to said time table; and

fourth means for allowing entry of data and command for operating the managing system and controlling updating of contents in said first and/or second memory means.

22. A system as set forth in claim 21, wherein said step number to be given for each of steps in said rule table has first component common to said step number of each corresponding step in said common step table and second component independent of the step number of the corresponding step in said common step table for distinguishing the steps in said rule table from the corresponding step in said common step table.

23. A system as set forth in claim 22, wherein said rule table contains data indicative of effective period of each step therein in view of the laws and/or rules in the subject country, which effective period is defined by the staring date data and ending date data of said effective period.

24. A system as set forth in claim 23, wherein said effective period set in said rule table with respect to each step in said rule table is set in terms of a reference date, and said effective period data being associated with an identification of said reference date.

25. A system as set forth in claim 24, wherein said fourth means compares an input date corresponding to said reference date with said starting date data and ending date data in response to entry of said step number for checking whether the updating of step date.

26. A system as set forth in claim 25, wherein said second memory stores said rule table including a rule for selecting one or more necessarily occuring nest steps with respect to current status of the application.

27. A system as set forth in claim 26, which further comprises a display and fifth memory means for storing a plurality of display formats to be displayed on said display, and said rule table in said second means storing said rule including a rule for selecting one of display formats according to the step to entry data.

28. A system as set forth in claim 27, wherein each of said display format is accessible by identifying step in said rule table by entry of said step number.

29. A system as set forth in claim 27, which further comprises sixth memory means for storing a plurality of printer document data which is accessible by identifying the step for preaprating letters.

30. A system as set forth in claim 29, wherein said printer document data stopred in said sixth memory means comprises first component containing fixed letter format to be commonly used in various steps and for various applications in various countries, and second component adapted to accept specific variables with respect to subject step and subject application.

31. A system as set forth in claim 30, wherein said second component stored in said sixth memory means is a letter format taking said specific variable as a part of the letter.

32. A system as set forth in claim 31, wherein said fourth means picks up variables from the corresponding file page of said local case data file in said first means for automatically completing said letter in said second component.

33. A system as set forth in claim 32, wherein said fourth means further picks said variables to constitute part of said letter of said second component from said information stroed in said first memory means.

34. A system for managing preparation and prosecution of applications to be filed in various countries for protection of industrial proterty right, comprising:

first memory means for storing informations concerning each application, said first memory means comprising database file including identification of each application, identification of country to file the application, filing particular and so forth;

second memory means for storing a rule table for controlling processing of application throughout preapration and prosection of the application and a time table for controlling calculation of the term, said rule being established with respect to each contry to file the applications for defining order of steps to be taken action during preparation and prosecution of the application, said steps in said rule table being identified by given step numbers and for establishing a time table for determining due dates for taking action with respect to the corresponding country and accessible by identifying the country and step number of corresponding step set in said rule table in the process of application;

third memory means for establishing case data file containing a plurality of file pages, each of which is adapted to store file data with respect to subject application, said store file data including a history data showing the histroy of preparation and prosection and current status of the subject application, each file page of said case file further including data showing due date for taking necessary action derived based on entered data according to said time table;

fourth memory means for storing a plurality of display formats, each of which is corresponded to one of said steps set in said rule table and is accessible by identifying the subject step by setting said step number, and each of said display format including guidances for requiring entry of data;
a display; and

fifth means for allowing entry of data and command for operating the managing system, reading out one of said display formats according to set step number for displaying selected one of display formats on said display, and controlling updating of contents against display format.

35. A system as set forth in claim 34, wherein said fourth memory means includes first group of display formats accessible through said fifth means for updating said rule table, secor group of display format accessible through sa, fifth means for updating said time table; and third group of display formats accessible through said fifth means for updating said case data file.

36. A system as set forth in claim 35, wherein said step number to be given for each of steps in said rule table has first component common to said step number of each corresponding step in said common step table and second component independent of the step number of the corresponding step in said common step table for distinguishing the steps in said rule table from the corresponding step in said common step table.

37. A system as set forth in claim 36, wherein said fourth memory means further includes a display format to be utilized for esatblishing said rule table by selecting steps in said common step table.

38. A system as set forth in claim 36, where said fourth memory means further include display format to be utilized for establishing said time table.

39. A system as set forth in claim 36, wherein said rule table contains data indicative of effective period of each step therein in view of the laws and/or rules in the subject country, which effective period is defined by the staring date data and ending date data of said effective period.

40. A system as set forth in claim 39, wherein said effective period set in said rule table with respect to each step in said rule table is set in terms of a reference date, and said effective period data being associated with an identification of said reference date.

41. A system as set forth in claim 40, wherein said fifth means compares an input date corresponding to said reference date with said starting date data and ending date data in response to entry of said step number for checking whether the updating of step date.

42. A system as set forth in claim 4I, wherein said second memory stores said rule table including a rule for selecting one or more necessarily occuring nest steps with respect to current status of the application.

43. A system as set forth in claim 36, which further comprises sixth memory means for storing a plurality of ·printer document data which is accessible by identifying the step for preaprating letters.

44. A system as set forth in claim 43, wherein said printer document data stopred in said-sixth .memory means comprises first component containing fixed letter format to be commonly used in various steps and for various applications in various countries, and second component·adapted to accept specific variables with respect to subject step and subject application.

45. A system as set forth in claim 44, wherein said second component stored in said sixth memory means is a letter format taking said specific variable as a part of the letter.

46. A system as set forth in claim 45, wherein said fifth means picks up variables from the corresponding file page of said local case data file in said first means for automatically completing said letter in said second component.

47. A system as set forth in claim 45, wherein said fifth means further picks said variables to constitute part of said letter of said second component from said information stored in said first memory means.

48. A system for managing preparation and prosecution of applications to be filed in various countries for protection of industrial proterty right, comprising:

first memory means for storing informations concerning each application, said first memory means comprising database file including identification of each application, identification of country to file the application, filing·particular and so forth;

. second memory means for storing a rule table for controlling processing of application throughout preapration and prosection of the application and a time table for controlling calculation of the term, said rule being established with respect to each contry to file the applications for defining order of steps to be taken action during preparation and prosecution of the application, said steps in said rule table being identified by given step numbers and for establishing a time table for determining due dates for taking action with respect to the corresponding country and accessible by identifying the country and step number of corresponding step set in said rule table in the process of application;

third memory means for establishing case data file containing a plurality of file pages, each of which is adapted to store file data with respect to subject application, said store file data including a history data showing the histroy of preparation and prosection and current status of the subject application, each

file page of said case file further including data showing due date for taking necessary action derived based on entered data according to said time table;

fourth memory means for storing a plurality of printer document formats, each of which is corresponded to one of said steps set in said rule table and is accessible by identifying the subject step by setting said step number.;

a printer; and

fifth means for allowing entry of data and command for operating the managing system, reading out one of said printer document formats according to set step number for displaying selected one of printer document formats for preparing letter, and controlling updating of contents in said first, second, third and fourth memory means.

49. A system as set forth in claim 48, which further comprises sixth memory means for storing a plurality of display formats, each of which is corresponded to one of said steps set in said rule table and is accessible by identifying the subject step by setting said step number, and each of said display format including guidances for requiring entry of data, and a display.

50. A system as set forth in claim 49, wherein said display formats stored in said sixth means includes printer document display formats, each corresponding to one of said printer docuemnts formats stored in said fourth means.

5I. A system as set forth in claim 50, wherein said sixth memory means further includes first group of display formats accessible through said fifth means for updating said rule table, second group of display format accessible through said fifth means for updating said time table; and third group of display formats accessible through said fifth means for updating said case data file.

52. A system as set forth in claim 5I, wherein said step number to be given for each of steps in said rule table has first component common to said step number of each corresponding step in said common step table and second component independent of the step number of the corresponding step in said common step table for distinguishing the steps in said rule table from the corresponding step in said common step table.

53. A system as set forth in claim 52, wherein said fourth memory means further includes a display format to be utilized for esatblishing said rule table by selecting steps in said common step table.

54. A system as set forth in claim 53, wherein said sixth memory means further includes a display format to be utilized for establishing said time table.

55. A system as set forth in claim 54, wherein said rule table contains data indicative of effective period of each step therein in view of the laws and/or rules in the subject country,

which effective period is defined by the staring date data and ending date data of said effective period.

56. A system as set forth in claim 55, wherein said effective period set in said rule table with respect to each step in said rule table is set in terms of a reference date, and said effective period data being associated with an identification of said reference date.

57. A system as set forth in claim 56, wherein said fifth means compares an input date corresponding to said reference date with said starting date data and ending date data in response to entry of said step number for checking whether the updating of step date.

58. A system as set forth in claim 57, wherein said second memory stores said rule table including a rule for selecting one or more necessarily occuring nest steps with respect to current status of the application.

59. A system as set forth in claim 58, which further comprises seventh memory means for storing a plurality of printer document data which is accessible by identifying the step for preaprating letters.

60. A system as set forth in claim 48, wherein said printer document formats stopred in said fourth memory means comprises first component containing fixed letter format to be commonly used in various steps and for various applications in various countries, and second component adapted to accept specific variables with respect to subject step and subject application.

61. A system as set forth in claim 60, wherein said second component stored in said sixth memory means is a letter format taking said specific variable as a part of the letter.

62. A system as set forth in claim 61, wherein said fifth means picks up variables from the corresponding file page of said local case data file in said first means for automatically completing said letter in said second component.

63. A system as set forth in claim 45, wherein said fifth means further picks said variables to constitute part of said letter of said second component from said information stored in said first memory means.

64. A computerized system for managing and controlling works, each containing a plurality of steps, comprising:

first memory means for storing first data for performing operation in each step, said first memory means containing said stored first data with respect to all of possible steps for performing said works;

second memory means for storing second data for performing operation in steps to perform each work, said second data being established by selecting and picking up said first data from first memory means according to possible steps to be taken for performing subjective work, said second data including next step data for identifying one or more possible next steps for guiding operations, and

said second data being accessible by indentifying subjective work to be done;

third means for allowing manual access of said first and/or second means for updating said first and/or second data; and

fourth means for managing and/or controlling operation each steps in each work accroding to said second data in said second memory.

65. A system as set forth in claim 64, wherein said second memory means includes a first memory section storing said second data, and a second memory section storing tables for setting term for completing the associated steps.

66. A system as set forth in claim 65, wherein all of said term setting rule tables are stored in said first memory means and picked up through said third means for establishing said second memory section.

67. A system as set forth in claim 66, which further comprises local work memory means for storing data with respect to each specific wor' and to be updated according to said seconu data.

68. A system as set forth in claim 67, wherein each of said specific work data in said local work memory means is accessible by identifying the work by means of an unique work code signal to each specific work.

69. A system as set forth in claim 68, each term setting table is accessible by identifying the associated step.

70. A system for managing preparation and prosecution of applications for protection of industrial property rights, comprising:

first memory means for storing information concerning each application, including identification of application;

second memory means for storing rules for controlling processing of applications throughout preapration and prosection of the application, said rule defining order of steps to be taken during preparation and prosecution ' the application and establishing a time table tc due dates for taking action, said rule including identification of next steps one of which is possibly occur subsequently;

third means for displaying necessary information and guidance for processing the application including entry of data according to the rule stored in said second means; and

fourth means for allowing entry of data and commands for operating the managing system and controlling updating of contents in said first and/or second memory means.

71. A system as set forth in claim 70, wherein said first memory means further comprises a local case data file having a plurality of file pages each storing case data of each corresponding application, said case data including data indicative of history of the application and current status of the application.

72. A system as set forth in claim 71, wherein said second memory stores said rule including a rule for selecting one or more next step with

respect to current status of the application.

73. A system as set forth in claim 72, which further comprises fifth memory means for storing a plurality of display formats to be displayed on said third means, and said second means storing said rule including a rule for selecting one of said display formats according to the step to entry data.

74. A system as set forth in claim 73, wherein said second memory means stores data with respect to each of a plurality of steps in each rule table, each of steps in said rule table are identified by a step number given thereto.

75. A system as set forth in claim 74, wherein said rule table in said second memory means further contains term calculation data for calculating and deriving due date with respect to a reference date in each step, said term calculation data being accessible by identifying step by entry of step number through said fourth means.

76. A system as set forth in claim 75, wherein said rule table contains data indicative of effective period of each step therein in view of the laws and/or rules, said effective period being defined by the starting date data and ending date data of said effective period.

77. A system as set forth in claim 76, wherein said effective period set in said rule table with respect to each step in said rule table is set in terms of a reference date, and said effective period data being associated with an identification of said reference date.

78. A system as set forth in claim 72, which further comprises fifth memory means for storing a plurality of display formats to be displayed on said third means, and said second means storing said rule including a rule for selecting one of the display format of the step at which data is to be entered.

79. A system as set forth in claim 78, wherein each of said display formats is accessible by identifying step in said rule table by entry of said step number.

80. A system as set forth in claim 79, which further comprises sixth memory means for storing document printing format data which is accessible by identifying the step for preparating letters.

81. A system as set forth in claim 80, wherein said printer document data stored in said sixth memory means comprises a first component containing a plurality of fixed letter formats commonly used in various steps and for various applications in various countries, and second component adapted to accept specific variables with respect to subject step and subject application.

82. A system as set forth in claim 81, wherein said second component stored in said sixth memory means is a letter format taking said specific variable as a part of the letter.

022/485

FIG. 1

CPU 1

WORKING AREA 5

KEYBOARD 2

DISPLAY 3

PRINTER 4

DOCUMENT DATA FILE 40

DISPLAY DATA FILE 50

MASTER FILE 10

RULE DATA FILE 20

RULE TABLE 206 208

TIME-CONTROL DATA FILE 204

202

CASE FILE 30

DOCUMENTING CONTROL

DOCUMENTING ITEM-ACCESS CONTROL

DISPLAY CONTROL

DISPLAY DATA-ACCESS CONTROL 60

2104 *FIG.2*

2101 2102 206
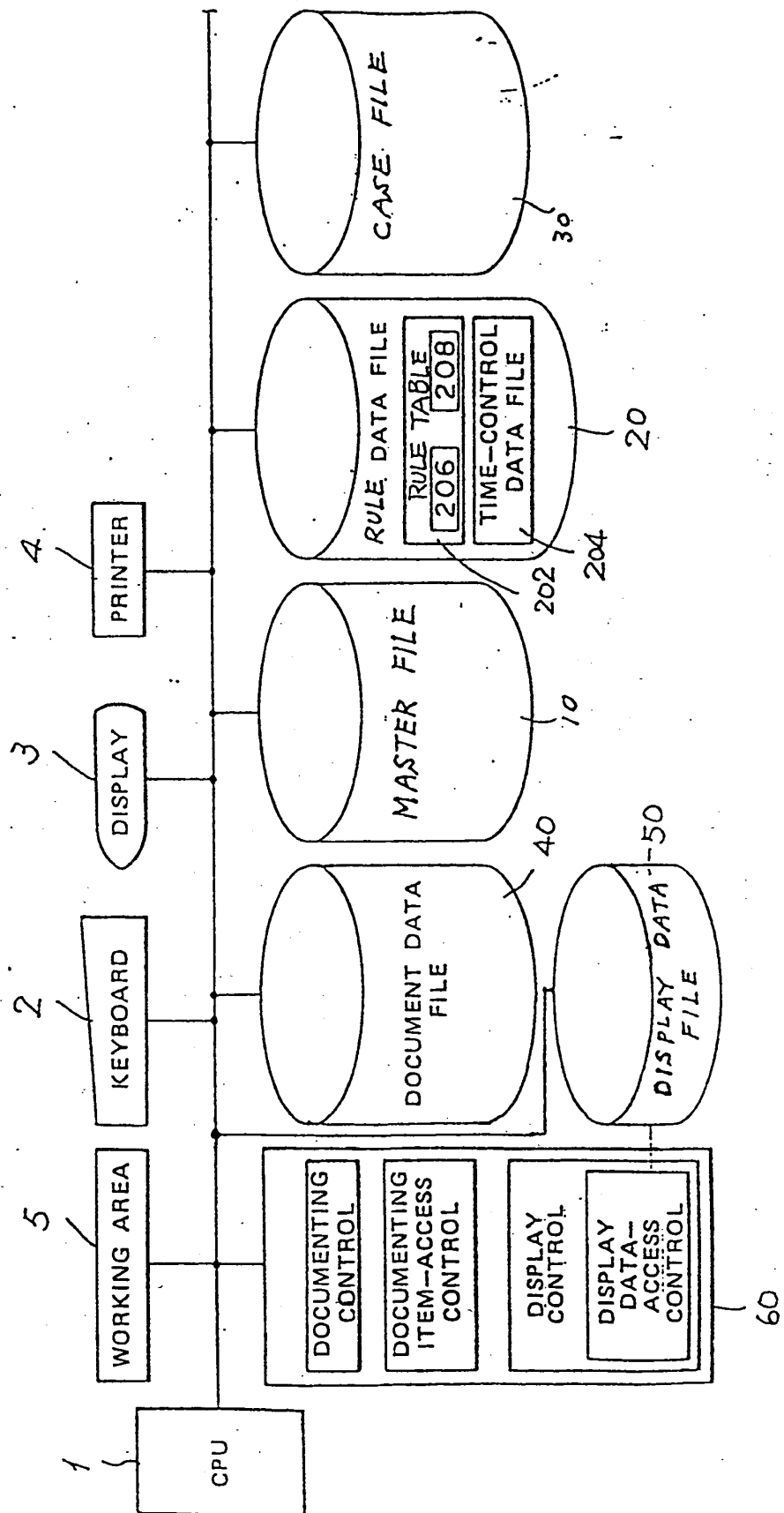
COMMON STEP NO.	COMMON STEP NAME
	ABBREVIATED STEP NAME	— 2103
	COMMON DISPLAY NAME	← 210
COMMON STEP NO.	COMMON STEP NAME
	ABBREVIATED STEP NAME	— 210
	COMMON DISPLAY NAME
COMMON STEP NO.	COMMON STEP NAME
	ABBREVIATED STEP NAME	← 210

FIG. 3

2200   221   222   2203   220   208

STATE CODE	ROUTE CODE			
STEP NO.				
LEGAL TERM	REFERENCE ITEM CODE			
STEP NAME				
ABBREVIATED STATE NAME				
DISPLAY NAME	2210	2211	2212	2213
START CODE	INDEPENDENT FLG.	STEP RANGE	STEP REPEAT FLG.	NEXT STEP FLG.
NEXT STEP NO.				
NEXT STEP NO.				
STEP NO.				
LEGAL TERM				

2204, 2205, 2206, 2207, 2208, 2209, 2214, 2215, 2203, 2204

FIG.4

START

SELECT MENU — 1001

DISPLAY MENU — 1002

DISPLAY RULE-DATA UPDATE MENU — 1003

INPUT STATE CODE — 1004

LOCATE NON-SET ITEM — 1005

1006 — DISPLAY NON-SET ITEM

1007 — SELECT SET/SELECTION OF STEP

1008 — SET/SELECT

COMMON STEP SET

SELECT

LOCAL STEP SET

1009 — DISPLAY

1010 — DISPLAY COMMON STEP SETTING INPUT PAGE

1011 — INPUT STEP NO. & STEP NAME

1012 — STORE

END

DISPLAY — 1013

DISPLAY STEP SELECTION INPUT PAGE — 1014

INPUT INCREASED NUMBER — 1015

STORE — 1016

END

DISPLAY — 1017

DISPLAY LOCAL STEP SET INPUT PAGE — 1018

SET STEP — 1019

STORE — 1020

IS NEXT STEP ? — 1021

NO

END

YES

DISPLAY — 1022

DISPLAY NEXT STEP INPUT PAGE — 1023

SET NEXT STEP — 1024

STORE — 1025

END

FIG. 5

```
STATE CODE    [U S    ]
ROUTE CODE    [0      ]    (0:NATIONAL, 1:EPC, 2:PCT, 3:CONFIRM)

              (ENTER)
         1. UPDATE RULE-BOOK (NEW, RENEW)
         2. SHOW                                         NON-SET
            ENTER SUBSEQUENTLY OF 1 OR 2
             A: HEADER SET
             B: TERM SET
             C: NO. SET
             D: STEP SELECT ~ STEP SET
             E: STEP(INDIVIDUAL) SET
             F: PERIOD SET
             G: COMMON STEP. SET
             H: DATE SET
             I: INPUT FOR NON-SET ITEM
             J: DELETE STEP

         9. END

PROCESS CODE [       ]      ENTER E OR J WHEN 1 OR 2 [           ]
```

FIG. 6

```
STATE CODE    [U S    ]
ROUTE CODE    [0      ]    (0:NATIONAL, 1:EPC, 2:PCT, 3:CONFIRM)

              (ENTER)
         1. UPDATE RULE-BOOK (NEW, RENEW)
         2. SHOW                                         NON-SET
            ENTER SUBSEQUENTLY OF 1 OR 2
             A: HEADER SET                                  N
             B: TERM SET                                    N
             C: NO. SET                                     N
             D: STEP SELECT ~ STEP SET                      Y
             E: STEP(INDIVIDUAL) SET
             F: PERIOD SET                                  Y
             G: COMMON        SET                           Y
             H: DATE SET                                    Y
             I: INPUT FOR NON-SET ITEM                      Y
             J: INDIVIDUAL STEP DELETE

         9. END

PROCESS CODE [ I G ]      ENTER E OR J WHEN 1 OR 2 [ 0 0 1 0 1 ]
```

FIG. 7

206 2102 2103 2104

STEP NO.	COMMON STEP NAME / ABBREVIATED NAME / COMMON DISPLAY NAME
A 0 1	FIRST APPLICATION / FIRST APPLICATION / APPLICATION PREPARATION
0 0 1	FILING/FILING RECEIPT / FILING/RECEIPT / FILING/FILING RECEIPT
0 0 2	FILING/FILING RECEIPT(WITH PRE.-EXAM.) / FILING/RECEIPT(PRE-EXAM.) / FILING/FILING RECEIPT(WITH PRE.-EXAM.)
0 0 3	REQUEST PRELIMINARY EXAMINATION / PRE.-EXAMINATION / REQUEST PRELIMINARY EXAMINATION

210

FIG. 8

STATE: U S   U. S. A.   KIND: NATIONAL

INC. STP	STEPS	STEP NO	STEP NAME
0 0	0 0	A 0 1	FIRST APPLICATION
0 0	0 1	0 0 1	FILING/FILING RECEIPT
0 0	0 0	0 0 2	FILING/FILING RECEIPT (PRE-EXAM.)
0 0	0 0	0 0 3	REQUEST PRELIMINARY EXAMINATION
0 0	0 0	0 0 4	RECEIPT SEARCH REPORT
0 0	0 0	0 0 6	FIRST PUBLICATION
0 0	0 0	0 0 7	RECEIPT ORDER FOR EXAM. (AU)
0 0	0 0	0 0 8	REQUEST SUBSTANTIVE EXAMINATION
0 0	0 0	0 1 0	REQIREMENT INFORMATION DISCLOSURE (CA)
0 0	0 0	0 1 1	RESPONSE INFORMATION DISCLOSURE (CA)
0 0	0 0	0 2 0	AMENDMENT (PCT ART. 19)
0 0	0 0	0 2 1	FILING TRANSLATION (PCT)
0 0	0 0	1 0 1	OFFICE ACTION (MERIT)
0 0	0 0	1 0 2	RESPONSE TO OFFICE ACTION (MERIT)
0 0	0 0	1 0 3	DECISION OF REJECTION
0 0	0 1	2 0 1	OFFICE ACTION (MERIT) (US/CA)
0 0	0 1	2 0 2	RESPONSE (MERIT) (US/CA)
0 0	0 1	2 0 3	FINAL OFFICE ACTION (US/CA)
0 0	0 1	2 0 4	AMENDMENT (RULE 116)

310   311   312   313

0227485

FIG. 9

```
                    * * * SET STEP (1) * * *        DATE  01/10/85
STATE: U S  U. S. A.   ROUTE: NATIONAL    LAST UPDATING DATE  01/07/85
STEP NO.  0 0 1 0 1    REF. DATE [1]    (1:FILING  2:PUBLICATION
                                         3:ISSUE  4:EFFECTIVE)
    LEGAL TERM    FROM [0 0 0 0 0 0]  TO [9 9 9 9 9 9]        320

    STEP NAME        [FILING/FILING RECEIPT              ]
    ABBREVITAED NATE [FILING/RECEIPT        ]
    DISPLAY NAME     [FILING/FILING RECEIPT (U. S. A.)   ]

    START?       325 [ Y ]  (Y:YES N:NO)  326

    INDEPENDENT? 327 [ N ]  (Y:YES N:NO)  328

                 STEPS [          ] ~ [          ]

    REPEAT?      330 [ S ]  (S:SINGLE M:MULTIPLE)    329

    NEXT STEP?       [ Y ]  (Y:EXIST N: NOT EXIST)  331

                  332            333
```

FIG. 10

```
              * * * SET NEXT STEP * * *    DATE     01/10/85
                                 LAST UPDATING DATE  01/07/85
STATE: U S   U. S. A.        ROUTE: NATIONAL
STEP NO.        STEP NAME
0 0 1 0 1       FILING/FILING RECEIPT
NEXT STEP
  Y / N         STEP NO.    STEP NAME
                00101       FILING/FILING RECEIPT
    Y           20101       OFFICE ACTION (MERIT)
                20201       RESPONSE (MERIT)
                20301       FINAL OFFICE ACTION
                20401       AMENDMENT (RULE 116)
                20501       ADVISORY ACTION
                20601       DECLARING INTERFERENCE
                20701       FILING TERMINAL DISCLAIMER
334             20801       FILING DISCLAIMER
                30101       FILING APPEAL (FINAL OFFICE ACTION)
                30301       OFFICE ACTION (APPEAL)
                30401       RESPONSE TO OFFICE ACTION (APPEAL)
                30501       DECISION ON APPEAL
    Y           51001       NOTICE OF ALLOWANCE
                51101       LETTERS PATENT
```

FIG. 11

```
        ┌─────────────┐
        │    START    │
        └──────┬──────┘
               │
        ┌──────┴──────┐
        │   SELECT    │──── 1101
        │    MENU     │
        └──────┬──────┘
               │
        ┌──────┴──────┐
        │   DISPLAY   │──── 1102
        │    MENU     │
        └──────┬──────┘
               │
        ┌──────┴──────┐
        │ DISPLAY RULE│──── 1103
        │UPDATING MENU│
        └──────┬──────┘
               │
        ┌──────┴──────┐
        │    INPUT    │──── 1104
        │  STATE CODE │
        │ & ROUTE CODE│
        └──────┬──────┘
               │
        ┌──────┴──────┐
        │    FIND     │──── 1105
        │  NON-SET ITEM│
        └──────┬──────┘
               │
        ┌──────┴──────┐
        │   DISPLAY   │──── 1106
        │ NON-SET ITEM │
        └──────┬──────┘
               │
        ┌──────┴──────┐
        │   SELECT    │──── 1107
        │TIME-CONTROL TABLE│
        └──────┬──────┘
               │
            ╱──┴──╲
           ╱  IS   ╲           NO
          ╱ DUE DATE SET╲──────────────  1108
          ╲    ?    ╱
           ╲       ╱              │
            ╲──┬──╱               ▼
             YES        TO OTHER DISPLAY PAGE
               │
        ┌──────┴──────┐
        │   DISPLAY   │──── 1109
        └──────┬──────┘
               │
        ┌──────┴──────┐
        │   DISPLAY   │──── 1110
        │ DUE DATE SET│
        │  INPUT PAGE │
        └──────┬──────┘
               │
        ┌──────┴──────┐
        │  SET DUE    │──── 1111
        │    DATE     │
        └──────┬──────┘
               │
        ┌──────┴──────┐
        │    STORE    │──── 1112
        └──────┬──────┘
               │
        ┌──────┴──────┐
        │     END     │
        └─────────────┘
```
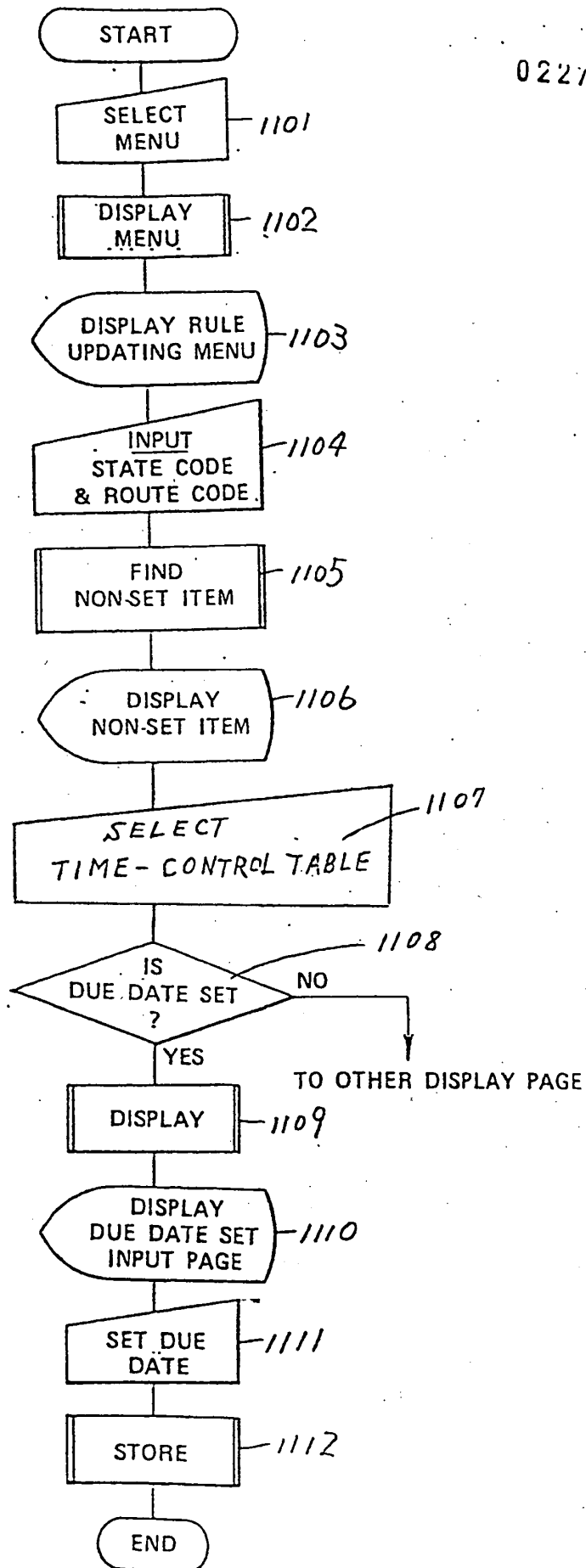
FIG. 12

```
              * * * DUE DATE SET * * *
                                        DATE 85/10/18
STATE:  U. S.  U. S. A. ROUTE: NATIONAL   LAST UPDATING DATE 85/07/26
  NEW   STEP NO.        DATE CODE                 STEP NO.    DATE CODE
340 ─┤   201  │      │   201   ├─341      342 ─┤ 20101 │    │  202  │
  → STATE CODE,   * 1: FIRST PARENT   *2: DIRECT PARENT  3: SELF
                                                              343
```

	YEAR	MONTH	DATE	OCCURENCE
DUE DATE	00	03	000	
EXTENSION	01	01	000	03

344

345   346

FIG. 13

```
U S FILE (0)
    1: HEADER SET FILE
    2: TERM SET FILE
    3: NUMBER SET FILE
    4: PERIOD SET FILE

         .
         .
         .

U S FILE (2)
         .
         .
         .
         .
         .
```

0227485

FIG. 14

```
U S PERIOD SET

    (1)  2 0 1 0 1 (OFFICE ACTION - MERIT)
                                    350              351
                   DUE DATE                          EXTENSION

         YEAR     MONTH   DAY      Y/N     YEAR    MONTH   DAY    TIME
          00       03     000       Y       00      01    000     3

    (2)  3 0 1 0 1 (FINAL OFFICE  ACTION)
                               .
                               .
                               .
                               .
```

FIG. 15

START

SELECT
OFFICE ACTION
DISPLAY — 1201

DISPLAY — 1202

DISPLAY
OFFICE ACTION
PAGE — 1203

INPUT
CASE NO — 1204

NEW ? — 1205

YES — NO

FIND
LAST HYSTERISTS — 1206

SEARCH
STEP TABLE — 1207

DISPLAY — 1208

DISPLAY
NEXT STEP — 1209

FIND
HYSTERISIS — 1210

SEARCH
STEP TABLE — 1211

DISPLAY — 1212

DISPLAY
HYSTERISIS — 1213

INPUT
STEP NO. — 1214

DISPLAY — 1215

DISPLAY
DATEINPUT PAGE — 1216

INPUT
DATA — 1217

STORE — 1218

END
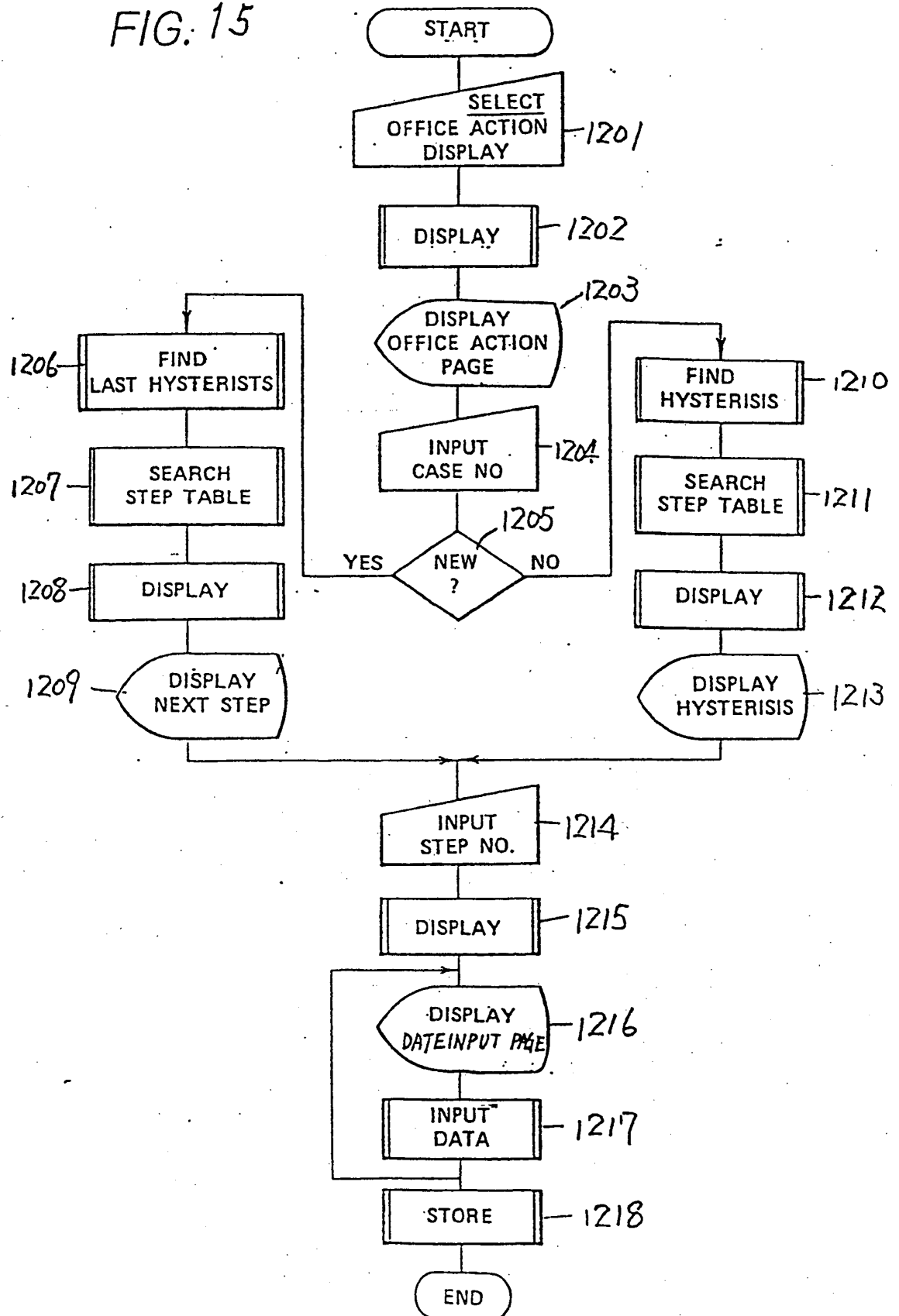
FIG. 16

UNIT REF. NO.	STATE CODE	ROUTE CODE	
FILING PARTICULAR			
STEP NO.	SELECT DATE	DATE NO.	DATE
0 0 1 0 1	8 4 0 1 0 4	0 0 1	8 4 0 1 0 2

360 361 362 363 364 365 366 367

FIG. 17

REF. NO. [S84P100US00] KIND [1]   (1: NEW 2:MODIFY)   STEP NO.

STEP NO. *NEXT STEP* 370   STEP NAME   371   *INDEPENDENT STEP* STEP NO.   STEP NAME

FIG. 18

370   371

REF. NO. [S84P100US00] KIND [1] (1: NEW 2: MODIFY) STEP NO. [20101]

NEXT STEP		INDEPENDENT STEP	
STEP NO.	STEP NAME	STEP NO.	STEP NAME
20101	OFFICE ACTION (MERIT)	20601	DELARATION INTERFERENCE
51001	NOTICE OF ALLOWANCE	20801	FILING DISCLAIMER
		70101	RELEVANT MATERIAL
		70201	INFORMATION DISCLOSURE
		70301	INFORMATION DISCLOSURE (BY THIRD)
		80101	VOLUNTARY AMENDMENT
		82001	KEYWORD
		83001	REF. NO.. OF RELATED APPLN.
		84001	MODEL (WORKING)
		90101	FINAL RESULT

372   373

FIG. 19

REF. NO. [S84P100US00]   KIND [2] (1:NEW 2:MODIFY) STEP NO. [00101]

NEXT STEP		INDEPENDENT	
STEP NO.	STEP NAME	STEP NO.	STEP NAME
00101	FILING/FILING RECEIPT		

374

FIG. 20

0227485

```
                    START
                      │
              ┌───────────────┐
              │    DISPLAY    │
              │     DATE      │──── 1311
              │  INPUT PAGE   │
              └───────────────┘
                      │
                      │      1312
              ┌───────────────┐
              │    INPUT      │
              │  FROM DATE    │
              └───────────────┘
                      │          1313
              ┌───────────────┐
              │  FIND STATE   │
              └───────────────┘
                      │       1314
              ┌───────────────┐
              │    SEARCH     │
              │ DUE DATE FILE │
              └───────────────┘
                      │
              ┌───────────────┐
              │    SEARCH     │
              │   DUE DATE    │──── 1315
              └───────────────┘
                      │
              ┌───────────────┐
              │    DERIVE     │
              │   DUE DATE    │──── 1316
              └───────────────┘
                      │
              ┌───────────────┐
              │   DISPLAY     │──── 1317
              └───────────────┘
                      │
              ┌───────────────┐
              │   DISPLAY     │──── 1318
              │   DUE DATE    │
              └───────────────┘
                      │
              ┌───────────────┐
              │    INPUT      │──── 1319
              │  EXTENSION    │
              └───────────────┘
                      │
              ┌───────────────┐
              │     FIND      │
              │  EXTENSION    │──── 1320
              │     DATA      │
              └───────────────┘
                      │
                 ╱─────────╲
                ╱    IS     ╲        NO       1322
               ╱ EXTENSION   ╲─────────────┌──────────────┐
               ╲   SET ?     ╱             │   DISPLAY    │  (41)
                ╲          ╱  1321         │   ERROR      │
                 ╲───────╱                 └──────────────┘
                    │ YES                         │
              ┌───────────────┐                 END
              │    DERIVE     │
              │   SET NEW     │
              │   DUE DATE    │
              └───────────────┘
                    │
                 1323
```

```
          ┌───────────────┐
          │    DERIVE     │
          │    FINAL      │──── 1324
          │   DUE DATE    │
          └───────────────┘
                  │
                  │        1325
        YES  ╱─────────╲  NO
       ┌────╱  Yₑ ≤ Y_z ╲────┐
       │    ╲          ╱     │
       │     ╲───────╱       │
    1326│                 1327│
  ┌──────────┐        ┌──────────┐
  │ DISPLAY  │        │ DISPLAY  │
  │   NEW    │        │  ERROR   │
  │ DUE DATE │        │          │
  └──────────┘        └──────────┘
       │                   │
      END                 END
```
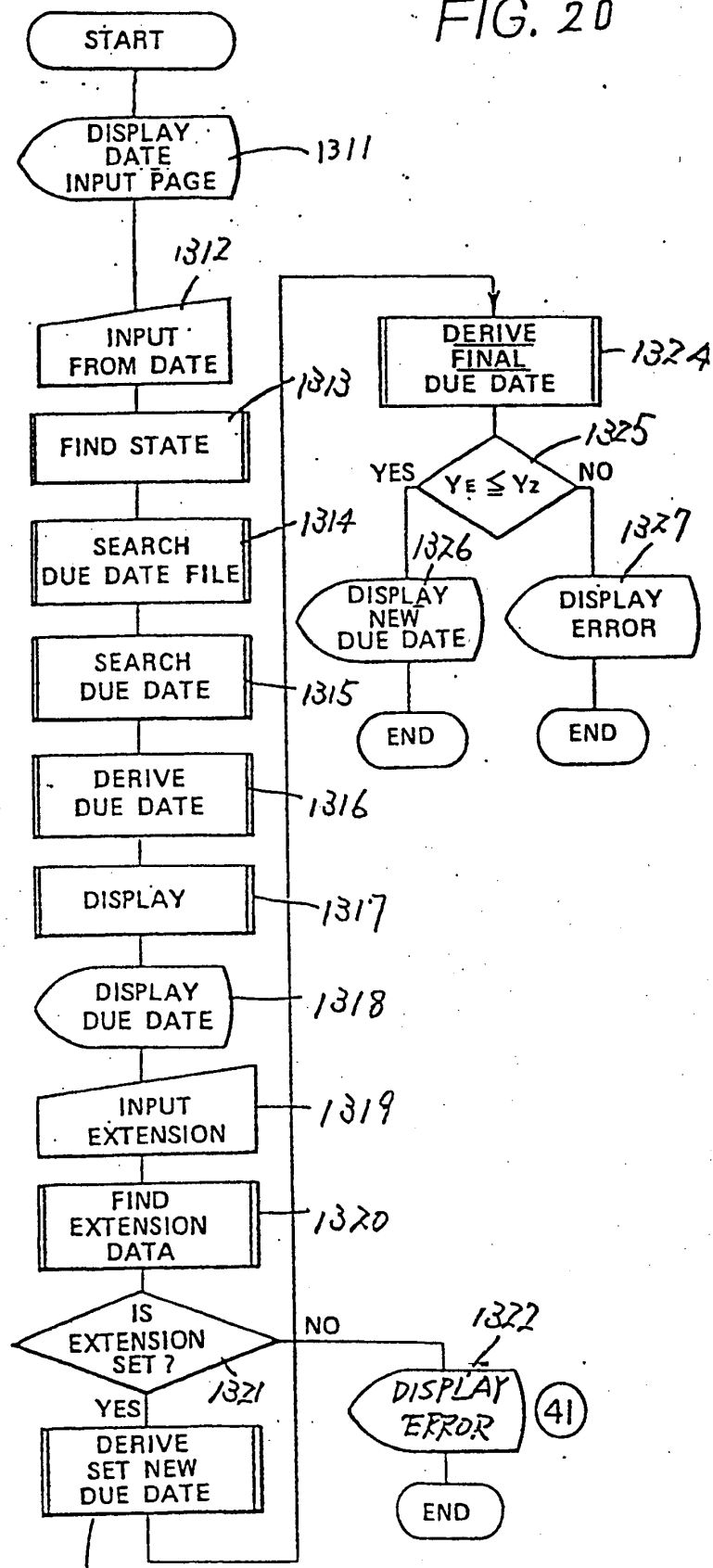
$Y_E \leq Y_Z$

FIG. 21

MODIFY   OFFICE ACTION/FINAL OFFICE ACTION (U. S. A.) DATE 85/10/18
REF. NO. S84P100US00 TITLE: INFORMATION CONVERSION SYSTEM
MAN IN CHARGE

399 379 380 381 382

375 PTO MAIL DATE	AGENT MAIL DATE 376	RECEIPT DATE 377	AGENT TERM 378	ER	EX	DUE DATE	INST. DATE	FILE DATE
1ST 850925	851001	851009	851225	☐	☐	☐	☐	☐
FILING	RESPONSE	(AMENDMENT	REMARKS)					
2ND ☐	☐	☐	☐	☐	☐	☐	☐	☐
3RD ☐	☐	☐	☐	☐	☐	☐	☐	☐
4TH ☐	☐	☐	☐	☐	☐	☐	☐	☐

384   385   386   387

FINAL OFFICE ACTION

383 ☐   ☐   ☐   ☐ ☐☐ ☐   ☐   ☐

FILING RULE 116 AMENDMENT   399 388   389 390
*INTERFERENCE(CONFLICT)
    OCCURENCE (1) ☐   (2) ☐
                   391   391
*TERMINAL DISCLAIMER   391 RELEVANT REF. NO. ☐
                    392
            INST. DATE ☐   FILE DATE ☐ 394
                        393
*DISCLAIMER   INST. DATE ☐   FILE DATE ☐
                            395   396
LETTER OUT   Y / N ☐   REFERENCE INPUT   Y / N ☐

397   398

FIG. 22

0227485

```
MODIFY   OFFICE ACTION/FINAL OFFICE ACTION (U. S. A.) DATE 85/10/18
REF. NO.  S84P100US00  TITLE: INFORMATION CONVERSION SYSTEM
MAN IN CHARGE                        377    378 399  379 380   381    382
```

	PTO MAIL DATE	AGENT MAIL DATE	RECEIPT DATE	AGENT TERM	ER/EX	DUE DATE	INST. DATE	FILE DATE
1ST	850925	851001	851009	851225	3 Y	851225		
	FILING	RESPONSE	(AMENDMENT	REMARKS)				
2ND	☐	☐	☐	☐	☐☐	☐	☐	☐
3RD	☐	☐	☐	☐	☐☐	☐	☐	☐
4TH	☐	☐	☐	☐	☐☐	☐	☐	☐

```
FINAL OFFICE ACTION           384        385    386       387
383     ☐           ☐         ☐        ☐     ☐ ☐          ☐    ☐
        FILING RULE 116 AMENDMENT              399      388   389  390
*INTERFERENCE(CONFLICT)
        OCCURENCE (1) ☐           . (2) ☐
*TERMINAL DISCLAIMER    391   RELEVANT REF. NO. ☐           +392
                  393                  394
        INST. DATE ☐         FILE DATE ☐

*DISCLAIMER    INST. DATE ☐         FILE DATE ☐
                             395                  396
LETTER OUT   Y / N ☐    REFERENCE INPUT   Y / N ☐
                  397                          398
```
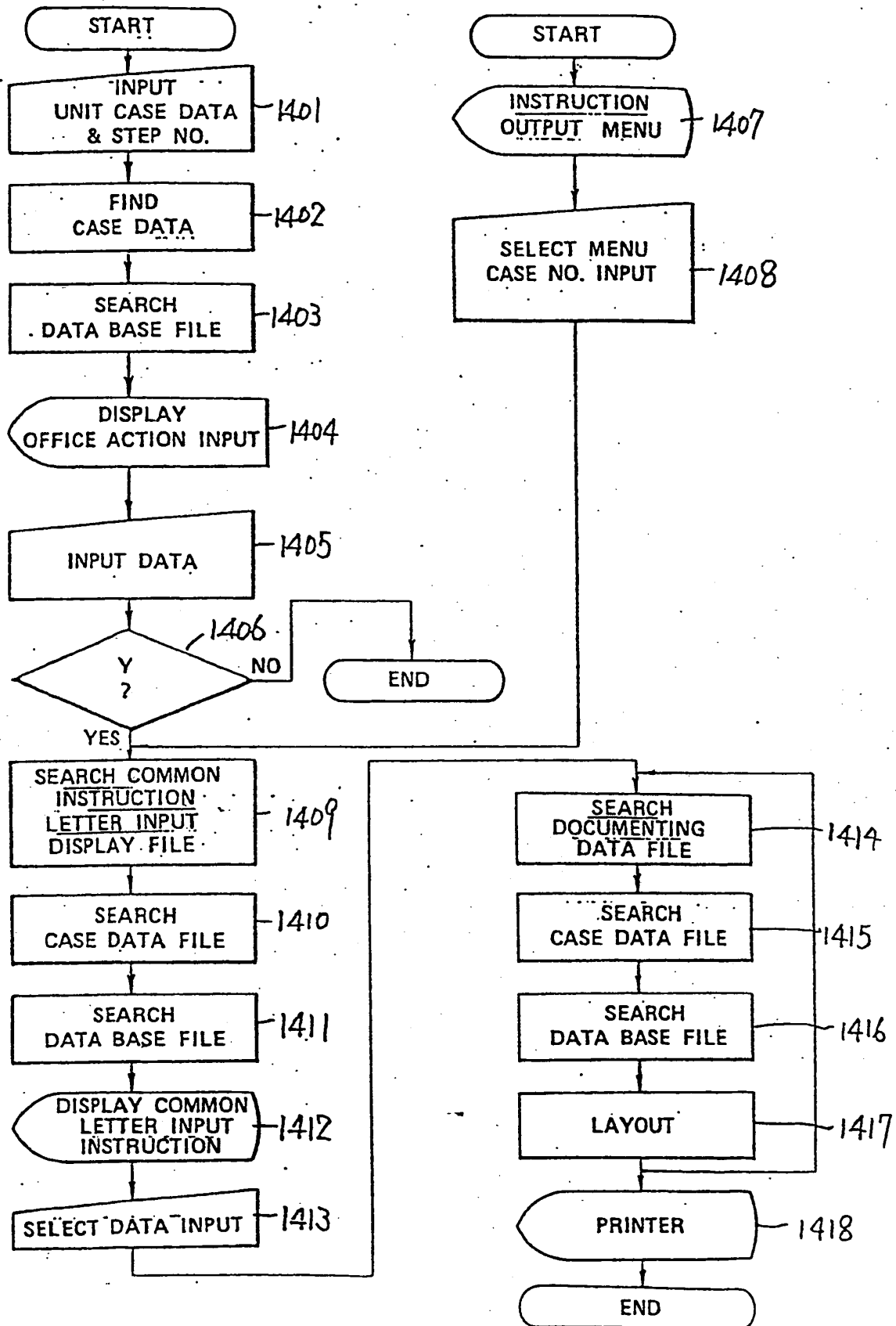
FIG. 23

Left flowchart:

START

INPUT
UNIT CASE DATA
& STEP NO. — 1401

FIND
CASE DATA — 1402

SEARCH
DATA BASE FILE — 1403

DISPLAY
OFFICE ACTION INPUT — 1404

INPUT DATA — 1405

Y ? — 1406
NO → END
YES ↓

SEARCH COMMON
INSTRUCTION
LETTER INPUT
DISPLAY FILE — 1409

SEARCH
CASE DATA FILE — 1410

SEARCH
DATA BASE FILE — 1411

DISPLAY COMMON
LETTER INPUT
INSTRUCTION — 1412

SELECT DATA INPUT — 1413

Right flowchart:

START

INSTRUCTION
OUTPUT MENU — 1407

SELECT MENU
CASE NO. INPUT — 1408

SEARCH
DOCUMENTING
DATA FILE — 1414

SEARCH
CASE DATA FILE — 1415

SEARCH
DATA BASE FILE — 1416

LAYOUT — 1417

PRINTER — 1418

END

FIG. 24

```
B300           * * *  LETTER OUTPUT MENU * * *        DATE  12/12/85

STEP CODE   [12]      REF. NO.[S84P100US00]

PREPARATION STEP
0 1      REQUEST FOR FORMAL PAPER
0 2      INFORMATION LIST
0 3      REQUEST FOR CERTIFIED COPY
0 4      REQUEST FOR TRANSLATION AND DRAWINGS
0 5      REQUEST FOR CHECKING OF ENGLISH DRAFT

APPLICATION FILING STEP
0 6      INSTRUCTION FOR FILING APPLICATION
0 7      INSTRUCTION FOR FILING APPLICATION AS FIRST APPLICATION
0 8      INSTRUCTION FOR FILING APOLICATION DERIVED FROM PARENT

INTERMEIDATE ACTION
0 9      REQUEST FOR EXAMINATION
1 0      INSTRUCTION FOR ART. 19 AMENDMENT (PCT)
1 1      INSTRUCTION FOR TRANSLATION (PCT)
1 2      INSTRUCTION FOR RESPONSE TO OFFICE ACTION/OPPOSITION
1 3      INSTRUCTION FOR RESPONSE TO RULE 40 ACTION (CA)
1 4      INSTRUCTION FOR OFFICE ACTION (TW)
1 5      INSTRUCTION FOR TRANSLATION (EPC)

OTHERS
1 6      INSTRUCTION FOR INFORMATION DISCLOSURE STATEMENT
1 7      INSTRUCTION FOR PRELIMINARY/VOLUNTARY AMENDMENT
1 8      INSTRUCTION FOR LATE FILING
1 9      COVER-LETTER FOR REMITTANCE

INTERNAL DOCUMENTS
2 0      NOTICE OF FOREIGN PATENT APPLICATIONS
         REQUEST FOR EXECUTION FOR FORMAL PAPERS
2 1      NOTICE FOR ISSUE OF PATENT
2 2      NOTICE FOR ABANDONMENT OF PATENT
2 3      FILE LABEL

9 9      EXIT
```

0227485

FIG. 25

400

```
*** INSTRUCTION FOR RESPONSE TO OFFICE ACTION/OPPOSITION ***
                                    402              DATE YY/MM/DD
REF. NO.[S84P100US00] 403 TITLE:[INFORMATION CONVERSION SYSTEM]
MAN IN CHARGE [    K    ]    AGENT  [   A LAW FIRM   ]- 404
[  Y  ]     WE ACKNOLEDGE RECEIPT OF YOUR LETTER OF [851001] ENCLOSING THE
405         FOLLOWING DOCUMENT(S).                      401
    410 -[ Y ] OFFICE ACTION
    411 -[   ] THE GROUND OF OPPOSITION
406 412-[   ] THE REFUTATION OF OPPOSITION

[  Y  ]     ENCLOSED ARE OUR COMMENTS ON THE ABOVE ACTION [850925]

[     ]     WE WILL FURTHER CONSIDER THE ACTION AND SEND OUR COMMENT SOON.
407         FURTHER TO OUR [   ] TELECOPY DATED [       ].  WE ARE ENCLOSING
                    413 -[   ] TELEX DATED
                    414 -[   ] LETTER DATED
                    415
408         HEREWITH COMMENTS.

[     ]     PLEASE  TAKE  NO  FURTHER  STEP  IN  PROSECUTING  THE  SUBJECT
409         APPLICATION AT THIS TIME.

[     ]     WE HAVE NO COMMENT TO CONTRIBUTE AND REQUEST YOU TO PREPARE A
            SUITABLE RESPONSE. -


INITIAL OF MAN IN CHARGE [          ]
```

FIG. 26

DECEMBER 13, 1985

423 → MR. A

424 → A LAW FIRM
1828 L STREET NORTHWEST
WASHINGTON, D.C. 20036-5104

425 → U. S. A.

426

Re: Patent Application No. in United States 06/123,456
   Your Ref: 012345
   Our Ref: S84P100US00   427

Dear Mr. A
We acknowledge receipt of your lette of
October 1, 1985 enclosing the following document(s).

420   the Office Action ⊢ 421

Enclosed are our comments on the above action.

Please prepare a suitable response and file it in your Patent Office
before the due date December 1, 1985.   422

We appreciate your cooperation in this matter.
Very truly yours,

Mr. B, General Manager,
Patent Div.
NN NN NN.
Enc

(12)   **EUROPEAN PATENT APPLICATION**

(72) Inventor: Iwai, Takeyuki
c/o Sony Corporation 7-35 Kitashinagawa
6-chome
Shinagawa-ku Tokyo(JP)
Inventor: Yoneyama, Shigeyuki

c/o Sony Corporation 7-35 Kitashinagawa
6-chome
Shinagawa-ku Tokyo(JP)
Inventor: Ikegami, Tsukasa
c/o Sony Corporation 7-35 Kitashinagawa
6-chome
Shinagawa-ku Tokyo(JP)
Inventor: Fujii, Reikichi
c/o Sony Corporation 7-35 Kitashinagawa
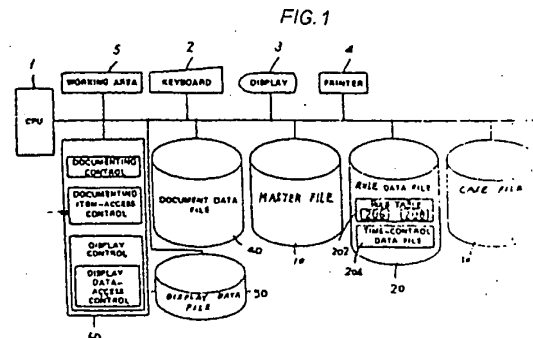6-chome
Shinagawa-ku Tokyo(JP)
Inventor: Miyauchi, Shigeru
c/o Sony Corporation 7-35 Kitashinagawa
6-chome
Shinagawa-ku Tokyo(JP)

(74) Representative: Ayers, Martyn Lewis Stanley
et al
J.A. KEMP & CO. 14 South Square Gray's Inn
London, WC1R 5EU(GB)

(54) **Computerized system for managing preparation and prosecution of applications in various countries for protection of industrial property rights.**

(57) A computerized system for managing preparation and prosecution of applications for protection of industrial property rights in various contries includes a data memory which stores a rule data for controlling input, output and internal operation of the system. The rule data includes information concerning required actions at each step of prosecution of applications in each country when the applications are filed. Such rule data is so designed as to provide proper guidance to the operator for guiding proper entry of input data in order to avoid error in operation. Preferably, the rule data consists of common rule data components which are commonly applicable for applications in any country and local rule data components which are specifically applicable for a specific country.

FIG. 1

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
Y	RUTGERS J. COMPUT. & LAW (USA), vol. 2, no. 1, 1971, pages 71-87; D.K. WEDDING et al.: "Foreign patent filing: a computer approach" * Page 78, line 6 - page 87, line 22 *	1-63,70 -82	G 06 F 9/44 G 06 F 15/21 G 06 F 15/40
Y	IBM SYSTEMS JOURNAL, vol. 21, no. 3, 1982, pages 327-350, New York, US; V.Y. LUM et al.: "OPAS: An office procedure automation system" * Page 327, line 15 - page 328, line 32; page 329, line 9 - page 337, line 26 *	1-63,70 -82	
X	AUTOTESTCON '82, Dayton, 12th-14th October 1982, pages 474-477, IEEE, New York, US; M.F. BATTAGLIA et al.: "Innovative maintenance utilizing videodisc" * Page 476 *	64-69	
X	AUTOTESTCON '83, Fort Worth, 1st-3rd November 1983, pages 336-341, IEEE, New York, US; V. RILEY et al.: "A systems approach to ate documentation" * Page 339, right-hand column, line 41 - page 340, right-hand column, line 33 *	64-69	TECHNICAL FIELDS SEARCHED (Int. Cl.4) G 06 F 9/00 G 06 F 15/00

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	13-06-1989	POPINEAU G.J.P.

EPO FORM 1503 03.82 (P0401)